35th ISMS Marketing Science Conference

ISMS SOCIETY FOR MARKETING SCIENCE informs ÖZYEĞİN ÜNİVERSİTESİ

www.marketingscience2013.com www.ozyegin.edu.tr

2013 ISMS MARKETING SCIENCE CONFERENCE

July 10: Doctoral Colloquium Venue: Özyeğin University

Nişantepe Mah. Orman Sok. 34794 Çekmeköy - Istanbul +90 216 564 90 00
www.ozyegin.edu.tr

July 11-13: Main Conference Venue: Swissôtel The Bosphorus Istanbul

Bayıldım Cad. No: 2 Maçka, Beşiktaş 34357 Istanbul-Turkey, +90 212 326 11 00
www.swissotel.com

ÖZYEĞİN
UNIVERSITY

ATLANTA2014

36th INFORMS

Marketing Science Conference

Emory University's Goizueta Business School

June 12-14, 2014

Doctoral Consortium: June 11, 2014

Conference Co-Chairs: Doug Bowman, Mike Lewis, David Schweidel

Contact info: MarketingScience2014@emory.edu

MarketingScience2014.com

EMORY | GOIZUETA BUSINESS SCHOOL

Dear Marketing Science Conference Participant,

On behalf of the INFORMS Society for Marketing Science (ISMS) and Özyeğin University (OzU), we welcome you to the 2013 Marketing Science Conference (July 11-13) and Doctoral Consortium (July 10) in Istanbul.

Bringing together marketing scientists from over twenty countries, East truly meets West in this conference edition, as it does in Istanbul, a bridge between worlds. Four special sessions and two regular sessions focus on emerging markets, including sessions devoted to India and China. Interactive and social media marketing, (open) innovation, and the marketing-finance interface are also major topics with several sessions each.

In addition to the exchange of ideas, you will have the chance to enjoy Turkish cuisine and hospitality, and the amazing combination of history and modernity that is Istanbul. Our conference hotel, Swissôtel, has wonderful facilities with Bosphorus views and is the setting for all the conference lunches and dinners. The hotel is located in a private park-like area of the city, within walking distance of the water and easy to reach by taxi or public transportation. We hope you will join us on the scenic Bosphorus cruise offered Saturday night to conclude the conference.

Özyeğin University is a third-generation university, combining top academic research with highly successful practical applications in business, society and teaching. Its brand new campus in Çekmeköy, Istanbul is the first environmentally certified one in Turkey. Just five years after its inception, OzU is home to 4000 students, MBA and executive MBA programs, several successful centers (for Entrepreneurship, Energy, Computational Finance, etc.) and the culinary school of Cordon Bleu. Faculty and students at the doctoral colloquium will enjoy this setting first hand - but all of you are warmly invited to drop by! In marketing, our growing department includes researchers from all sub-disciplines and from countries including Scotland (Steven Seggie), Belgium and the U.S. (Koen Pauwels), Pakistan and the U.S.(Romana Khan), Germany (Raoul Kübler) and Turkey (Tolga Akçura, Sinem Atakan, Esra Gençtürk and Bige Saatçioğlu).

We are delighted to welcome you to Istanbul for a most excellent academic and social program.

Sincerely,

Tülin Erdem, New York University

Erhan Erkut, Özyeğin University

Koen Pauwels, Özyeğin University

ELSEVIER

VOLUME **1** | NUMBER **1** | **JULY 2013**

JOURNAL OF INTERACTIVE MARKETING

SPONSOR OF THE INTERNET AND INTERACTIVE MARKETING SESSION

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The *Journal of Interactive Marketing*® is a quarterly publication from Marketing EDGE, formerly the Direct Marketing Educational Foundation

INFORMS Society of Marketing Science Board and Advisory Council

The Institute of Operations Research and Management Sciences (INFORMS) is an international, not-for-profit scientific society with 10,000 members, including Nobel laureates, dedicated to applying scientific methods to help improve decision-making, management, and operations. The Marketing Science Conference falls under the auspices of the INFORMS Society for Marketing Science (ISMS) sub-branch whose major purpose is to foster the development, dissemination, and implementation of knowledge, basic and applied research, and science and technologies that improve the understanding and practice of marketing.

INFORMS Marketing Science Conference

1979 Stanford University

David B. Montgomery, Dick Wittink

1980 University of Texas, Austin

Robert Leone

1981 New York University

John Keon

1982 University of Pennsylvania

Vijay Mahajan, Yoram Wind

1983 University of Southern California

Fred Zufryden

1984 University of Chicago

Steven Shugan

1985 Vanderbilt University

Russell Winer, Allan Shocker

1986 University of Texas, Dallas

Ram Rao

1987 HEC, France

Dominique Hanssens, Gilles Laurent

1988 University of Washington

Allan Shocker, Robert Jacobson

1989 Duke University

John McCann, Richard Staelin

1990 University of Illinois

S. Sudharshan

1991 University of Delaware/Dupont

Meryl Gardner, John Frey

1992 London Business School

Mark Uncles, Gerald Goodhardt

1993 Washington University

Chakravarthi Narasimhan

1994 University of Arizona

Dipankar Chakravarti, Ambar Rao

1995 University of New South Wales

John Roberts, Pamela Morrison

1996 University of Florida

Steven Shugan, Barton Weitz

1997 University of California, Berkley

Tulin Erdem, Miguel Villas-Boas, Russell Winer

1998 INSEAD, France

Erin Anderson, Hubert Gatignon

1999 Syracuse University

Amiya Basu, T. Mazumdar, S. P. Raj

2000 University of California, Los Angeles

Randolph Bucklin, Donald Morrison

2001 University of Mainz

Oliver Heil

2002 University of Alberta

Peter T. L. Popkowski Leszczyc

2003 University of Maryland

Brian Ratchford, Roland Rust, Venky Shankar

2004 Erasmus University, Rotterdam

Stefan Stremersch

2005 Emory University

Sundar Bharadwaj, Douglas Bowman, Sandy Jap

2006 University of Pittsburgh

Rabi Chatterjee, Jeff Inman, R. Venkatesh

2007 Singapore Management University

Sundar Bharadwaj, Jin K. Han,

David B. Montgomery, Chin Tiong Tan

2008 University of British Columbia

Charles B. Weinberg, Darren Dahl, Daniel Putler

2009 University of Michigan

Eugene Anderson, Fred Feinberg

2010 University of Cologne

Werner Reinartz, Karen Gedenk,

Franziska Völckner

2011 Rice University

Richard R. Batsell, Sharad Borle,

Ajay Kalra, Amit Pazgal

2012 Boston University

Shuba Srinivasan, Patrick Kaufmann

2013 Ozyegin University

Erhan Erkut, Tulin Erdem (NYU), Koen Pauwels

2014 Emory University

Douglas Bowman, Sandy Jap

RESTAURANT SUGGESTIONS

Reservations are highly recommended.

Asitane Cuisine: Turkish, Ottoman

Clearly, it was good to be the sultan, if he indeed ate at all like you do when you visit Asitane. From records of meals at Topkapi Palace (sans quantities) and delving into the memoirs of foreign diplomats of the time, the chef of Asitane has succeeded in re-creating 200 palace recipes plus about 200 original Ottoman-style recipes.

Kariye Hotel, Kariye Camii Sokak 18, Edirnekapı

TEL: 0 212 635-7997 www.asitanerestaurant.com

Aşşk Café Cuisine: Café, Light Fare

Set right on the Bosporus, this relaxed Mediterranean eatery offers menus largely sourced from local produce: artisanal olive oils, handmade jams, cheeses from nearby village markets. Come for brunch amid the parasols and colored tiles, for a fresh-coriander martini after a hectic day of sightseeing, or for dinner with a vegetarian friend (this is one of the few place in Istanbul that serves tofu).

64/B Muallim Naci Caddesi ,Kuruçeşme, Beşiktaş

TEL: 0 212 265-4734 www.asskkahve.com

Bebek Balıkçısı Cuisine: Fish, Mediterranean

Besides the distinguished tastes and painstaking service, the restaurant has a mythological atmosphere with Renaissance pictures on the walls. Located by the sea in Bebek, one of the fanciest towns by the Bosphorus, the restaurant is a great example of an excellent fish restaurant. Some of the restaurant's specialties are cold appetizers of eggplant salad with Melissa sauce, parsley salad, şevketi bostan root, and spinach salad. Their famous hot appetizers are calamari, fish balls, ocean delight, fish cooked on paper, and Fish in Salt.

26/A Cevdet Paşa Caddesi, Bebek

TEL: 0 212 263-3447 www.bebekbalikci.net

Borsa Cuisine: Turkish

Borsa has been serving top-quality Turkish cuisine since 1927, and features elegant décor and excellent service. The menu is made up of Turkish classics like lahmacun (Turkish-style pizza); içli köfte (kibbeh); mantı (Turkish-style ravioli); lakerda (salted bonito); imambayıldı (eggplant stuffed with tomatoes, onion, and garlic); and a wide variety of meat dishes, such as iskender kebap (roasted lamb spread over buttery pita bread, topped with a savory tomato sauce, a drizzle of butter, and a dollop of yogurt) and kuzu pirzola (lamb chops). This is not light fare, so come with an appetite!

Lütfi Kırdar Convention Center, Gümüş Caddesi No. 4, Harbiye

TEL: 0 212 232 42 01 www.borsarestaurants.com

Çınaraltı Restaurant Cuisine: Turkish

If you'd like to combine dinner at a meyhane with a fantastic waterside setting, head up the Bosphorus to the "village" of Ortakoy. It's right beside the water, with a close up view of the transcontinental Bosphorus Bridge and the stunning baroque mosque. Cinaralti has an extensive selection of hot and cold mezes, borek, pickles, fresh seafood, kebabs, grilled meats, salads and desserts. Diners are invited to select their fish from a refrigerated case inside the restaurant. At Cinaralti, prices are reasonable, the food is top notch and the view spectacular... what more could one ask for?

İskele Meydanı 28, Ortakoy

TEL:(0212) 261 4616 www.cinaralti.com

Corvus Wine and Bite Cuisine: Wine Bar/Aegean WALKING DISTANCE

Offering only Corvus wines, which are brought over from a new and successful winery in Bozcaada (a pristine island on the Aegean), this modern and sophisticated venue is focused not only on local wines but also on local ingredients to create tantalizing food and wine pairings. The extensive menu of small bites includes rustic breads, jams, and a variety of cheese.

Beşiktaş Şair Nedim Cd No:5

TEL: (0212) 260 5470

Feriye Restaurant Cuisine: Turkish

Located on the shore of the Bosphorus, with views of the Ortakoy Mosque and the iconic Bosphorus Bridge which links the European side of Istanbul to Asia, this large complex includes an a-la-carte restaurant, cafe and bar. It has two separate restaurant venues for summer and winter, with a large outdoor seating area operating during the warmer months. The menu, too, varies with the seasons, a result of the chefs' focus on the use of natural and seasonal ingredients.

Çırağan Cad. No: 40, Ortaköy

TEL: (0212) 227 2216 www.feriye.com

Giritli Cuisine: Turkish

A prix-fixe only menu of Cretan specialties includes a generous multicourse meal and unlimited local alcoholic drinks (wine or raki). The food is outstanding, with an enormous selection of delicious mezes like sea bass ceviche, herb-covered cubes of feta cheese with walnuts and green onion, and perfectly grilled calamari, followed by freshly caught fish. The restaurant garden, with its whitewashed walls and blue trim, feels like a slice of the Greek islands in the middle of Istanbul.

Keresteci Hakkı Sokak (Armada Otel Yanı) Cankurtaran / Ahırkapı

Tel: 0 212 458 22 70 www.giritlirestoran.com

Hamdi Cuisine: Turkish

Even though not located right by the water, the terrace of Hamdi has a gorgeous view of the water, and it is one of the city's premier kebab restaurants, with a menu of 17 different varieties of kebab, in addition to various meze (cold appetizers) and desserts.

Rüstem Paşa Mh., Kalçin Sk No:17, Fatih TEL:(0212) 528 0390

Hanedan Cuisine:Turkish/Fish/Meat WALKING DISTANCE

Sinanpaşa Mh. Çiğdem Sk No:27, Beşiktaş

TEL: 0 212 259 4017 www.hanedanrestaurant.com

Köşebaşı

Established in 1995, Köşebaşı is a kebab restaurant that serves authentic dishes from Adana and Tarsus in Southeast Anatolia. There is an amazing view of the water.

Reina, Muallim Naci Caddesi No.44, Ortaköy; TEL: 0212 258 06 83

Köşebaşı Nişantaşı, Bronz Sokak No:5 Maçka, İstanbul TEL: (212) 230 38 68

Hünkar

Cuisine: Ottoman, Turkish

One of the best places to dine on Turkish and Ottoman dishes, an upscale feel adds to the experience where the food and service receive full points every time. Open since 1950, the menu offers such dishes as Beğengili Kebab (eggplant puree with lamb chunks) as well as an array of olive oil dishes for those who prefer vegetables.

Nispetiye Caddesi No. 52, Etiler

TEL: 0 212 287 84 70 www.hunkar1950.com

Kalamata Meyhanesi

Cuisine: Turkish/Armenian WALKING DISTANCE

Kalamata Meyhanesi offers a modern take on traditional taverns. The venue offers outdoor seating at the garden in the back and a few tables on the street at the front. Live music, typical of Turkish taverns, is played every night (except for Mondays). A good selection of tavern fare is on offer, from cold and hot mezes to main dishes, including the day's catch. Rakı is obviously the drink of choice, but wine is also available. Excellent food and atmosphere, with the additional attraction of music.

Süleyman Seba Cd No:45 Akaretler

TEL: (0212) 258 8788 www.kalamatameyhane.com.tr

Kiva

Right in the shadow of the Galata Tower, Kiva offers traditional Anatolian dishes from every part of Turkey, particularly the East and Southeast. The menu has over a dozen kinds of soup and even more varieties of stew, casserole, and sarma and dolma (stuffed vegetables); some dishes feature exotic ingredients like thistle and cowpea. There are also Turkish comfort foods like karnıyarık (eggplant filled with minced meat), and a profusion of salads/appetizers including Middle Eastern offerings like hummus, muhammara, and baba ganoush.

Kiva, Galata Kulesi Meydanı No: 4, Galata; TEL: 0212 292 00 37

Nar Lokanta

Located in the heart of Sultanahmet by the Grand Bazaar's Nuruosmaniye gate, Nar Lokanta offers traditional Turkish food at its freshest and lightest, with dishes made using all-natural, regional products from throughout Anatolia, and the best quality olive oil. The menu at Nar Lokanta features familiar Turkish classics as well as a number of less common regional dishes, covering everything from Ottoman palace dishes to humble village fare.

Armaggan, Nuruosmaniye Caddesi No.65, 5th Floor, Nuruosmaniye;

TEL : (0212) 522 2800 www.narlokantasi.com

Nezih Kebap

With a beautiful view of the Bosphorus Nezih Kebap offers traditional meat dishes as well as starters with the içli köfte (burghul balls filled with seasoned minced meat) coming highly recommended.

Yahya Kemal Caddesi No.24, Rumelihisarı;

TEL: (0212) 265 74 55 www.nezihkebap.com

Park Şamdan

Open since 1982, Park Şamdan is a long-established favorite with locals and it is favored for its elegant and refined atmosphere. The restaurant specializes in classic Turkish dishes but with a continental.

Mim Kemal Öke Caddesi No. 18/1, Nişantaşı;

TEL: (0212) 225 07 10 www.parksamdan.com

Park Fora Cuisine: Seafood

Located in Cemil Topuzlu park by the sea in Kuruçeşme, the restaurant serves sea food since 1996. Accompanied by cold and hot starters of both Turkish and world cuisines, the place calls itself the best fish and sea food restaurant of Turkey.

Muallim Naci Caddesi Cemil Topuzlu Parkı İçi No:54/A, Ortaköy

Tel: 0 212 265 50 63-67 www.parkfora.com

Suda Kebap

Bringing together the regional cuisine of Gaziantep and the beautiful view of the seaside, Suda Kebap is a perfect place to enjoy fresh mezes and grilled meat dishes.

Galatasaray Adasi Suada, Kuruçeşme

TEL: (0212) 265 11 63 www.sudakebap.com.tr

Tuğra Cuisine: Ottoman, Turkish

If you wish to dine in a palace with a great view and fine food, This place has created a legend for itself with its innovative synthesis of foods from the entire Ottoman Empire against an imperial backdrop of regal colors and traditional floral motifs. Dishes include a delicious mackerel and red mullet dolma and a marinated lamb loin grilled with yogurt, tomato, and spicy butter sauce.

Çırağan Palace Kempinski, Çırağan Caddesi 34349 İstanbul, TEL: (0212) 258 3377

Vogue Cuisine: Mediteranean/International WALKING DISTANCE

Situated on the top of the Beşiktaş Plaza, this restaurant has stunning views of the Bosphorus and the Asian side of town from three terraces (two of which form part of the restaurant itself, and one of which is devoted to an excellent bar, featured on the World's Best Bars website). The restaurant offers a great range of Mediterranean and international cuisine, including a sushi bar, and has won Best Restaurant" from the Zagat Survey, among other accolades. Sunday buffet brunch is a particular favorite with regulars, with a full Turkish breakfast as well as continental options.

Akaretler Sports Cad. No: 92 BJK Plaza A Blok K: 13 Beşiktaş

TEL: 0 212 227 44 04 www.voguerestaurant.com

ISTANBUL PLACES TO GO, THINGS TO DO, FOOD TO TRY

We recommend checking out the visiting hours of the places that you plan to go. Some of them are closed on certain days and some of them close early. Also, it would be better if you could go to the historical places early in the morning since there may be long lines for entrance, especially at Topkapı Palace.

Topkapı Palace

http://www.ee.bilkent.edu.tr/~history/topkapi.html
Topkapı Palace, on the Seraglio Peninsula, became a museum in 1924. The Harem, Baghdat Pavilion, Revan Pavilion, Sofa Pavilion, and the Audience Chamber distinguish themselves with their architectural assets, while other artifacts reflect palace life. Gülhane Park is located on the slopes below Topkapı Palace extending to the seashore, and is popular among Istanbul residents for picnicking and open-air concerts. In the park is the Gothic Column, known to have been one of the main obelisks of the Byzantines, and an as yet unclassified, and therefore unofficial, Byzantine ruin.

AyaSofya (Hagia Sophia)

The magnificent Hagia Sophia was originally built by Justinian and used as a church for 916 years. It then became a mosque for 481 years and Atatürk declared it a museum in 1935. Considered the first and last unique application in terms of its architecture, magnificence and functionality, it has been the inspiration for Ottoman mosques for countless centuries. The incredible frescoes and mosaics in the upper gallery, despite being damaged, are among the most visited sites in the city. The Hagia Sophia is the number one must-see.

Sultanahmet Mosque (Blue Mosque)

Dubbed the "Blue Mosque" by Europeans because of its beautiful interior tiles with flower and tree motifs manufactured at the end of the high period of the great Iznik workshops, this is the only mosque in the world with six minarets. Built by Ahmet I between 1609 and 1616, the architect was Sedefkar Mehmet Aga, one of Mimar Sinan's most prominent students. The dome is 23.5 meters wide and 43 meters high. The shrine near the mosque houses the tombs of Ahmet I and his wife Kosem Sultan. On the east side of the mosque is the Arasta, a bazaar filled with souvenir shops. The Hunkar Mansion at the north side is today's Carpet and Kilim Museum

Yerebatan Sarayı (Basilica Cistern Underground)

Yerebatan Sarayı translates as 'Sunken Palace'. It's Istanbul's largest underground cistern and the only one renovated and opened for public viewing. Today Yerebatan Sarayı is a major tourist attraction and offers cool respite from Istanbul's searing summer heat. Pulsing lights, water dripping from the ceiling and eerie music played over strategically placed speakers add an air of mystery to the place. Note the two large Medusa heads supporting columns on the north side of the cistern. Wooden walkways allow visitors to view the whole cistern.

Çemberlitaş Turkish Bath (Hamam)

http://www.cemberlitashamami.com.tr
This is the most pleasant of all Istanbul's hamams. You can stretch out flat on the huge round navel stone, and gaze at the diffractions of shafts of daylight through the steam. The sounds of splashing water and muffled chatter echo around the dome and throughout the hamam. Mimar Sinan built the baths in 1584 - they were commissioned by Nurbanu, wife of Sultan Selim the Grim - and they have been in continuous service to the public ever since. There are separate sections for men and women.

Dolmabahçe Palace

http://www.guideistanbul.net/other/dolmabahce-palace
It is the last palace that was built in Ottoman Empire.
http://www.istanbulportal.com/istanbulportal/Dolmabahce.aspx

Ortaköy

http://www.turkeytravelplanner.com/go/Istanbul/Sights/Bosphorus/ortakoy.html
You can walk (around 20-25min) or take the taxi from Dolmabahçe to Ortaköy.
Go to Ortaköy for lunch or coffee; try "Kumpir" (baked potatoes filled with cheese, sausage, vegetables...). There is a row of Kumpir sellers at Ortaköy.

Bhosphorus Tour

There is a short Bhosphorus boat tour from Ortaköy or take a longer one starting from Eminönü.

Taksim

http://www.turkeytravelplanner.com/galeri/beyoglu/index.html
Walk around Beyoğlu and İstiklal Street. This area is also the main site of the protests in June. Although there has been no violence more recently, please exercise caution.

Turkish Cuisine (our favorites)

Appetizers (meze; typically presented to you all together for your pickings)
Vegetarian: Almost all of them: slow cooked beans (fasülye), eggplant (patlıcan)
Warm: Kalamar (fried squid rings)
Fish: Pick any in season at the specialized fish restaurants (balık restoran)
Dishes with Meat: İskender or Döner, İçlikofte, Lahmacun
Salat: Gavurdağ salata (pomegranate juice, walnuts, tomatoes, spices)
Deserts: Kazandibi (made from milk), Tavukgöğsü (made with chicken & milk), Sütlaç (rice pudding), Aşure (very traditional desert, mix of dried fruits & beans), Baklava

INFORMATION FOR SESSION CHAIRS, PRESENTERS, AND PARTICIPANTS

Guidelines for session chairs:

1. Please arrive at the room where you are chairing a session *at least 10 minutes before its official start time* (during the break prior to the session).
2. Plan to be present for the entire session.
3. Choose a seat in the front of the room where a presenter can easily observe you.
4. Introduce the session title at the beginning of the session and announce the allotted time per presenter. The allotted time already includes Q&A.
5. If presenters do not show up before the start of the session, you are free to allocate their time to other presenters.
6. Introduce each speaker at the beginning of his or her talk.
7. Let speakers know when there are 5 minutes and 2 minutes left of their allotted time.

Guidelines for presenters:

1. Please arrive at the room where you are presenting *at least 10 minutes before its official start time* (during the break prior to the session).
2. Bring your presentation on a USB key in appropriate format (generally PowerPoint) and copy your presentation to the desktop and ensure it works.
3. If you are not going to be present for the entire session, please let the session chair know.
4. If you do not show up before the start of the session, the chair is free to allocate your time to other presenters.
5. You will be prompted when there are 5 minutes and 2 minutes left of your time.

Guidelines for participants:

1. If you want to attend presentations of two different sessions that run at the same time, we kindly ask you to leave the sessions only at the beginning or end of a talk.
2. Please leave and enter the rooms quietly.

1 LEVEL 5
- Fuji Ballroom
- Fuji 1
- Fuji 2
- Fuji Foyer
- Bern
- Montreux
- Lausanne
- Foyer

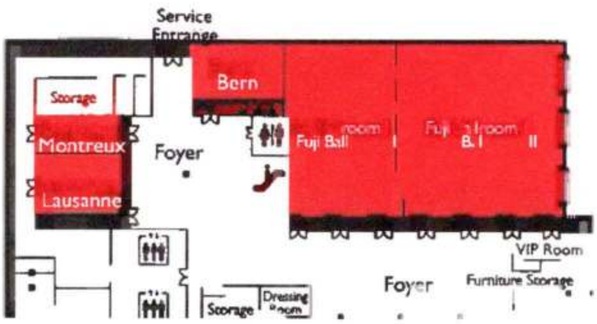
2 LEVEL 7
- Neuchatel
- Neuchatel Foyer
- Genéve
- Luzern
- Zurich
- Foyer

3 LEVEL 10
- Monte Rosa
- Monte Rosa 1
- Monte Rosa 2
- Mönch
- Mont Blanc
- Eiger
- Matterhorn
- Jungfrau
- Chamonix

4 LEVEL 7
- Asuka
- Asuka Foyer

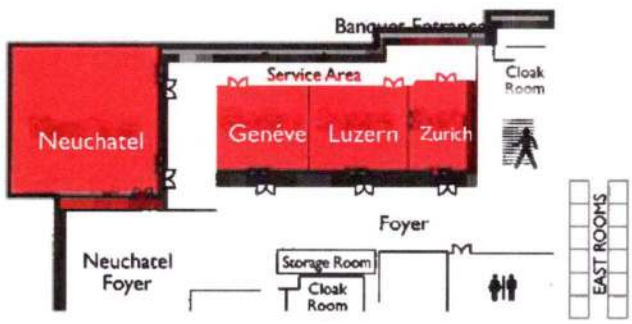
5 SWISSÔTEL RESIDENCE LOBBY LEVEL
- Mimosa
- Edelweiss
- Acacia
- Tulip

1 LEVEL 5



Fuji Ballroom, Fuji 1 Fuji 2, Fuji Foyer, Bern, Montreux, Lausanne, BML Foyer

LEVEL 7 2

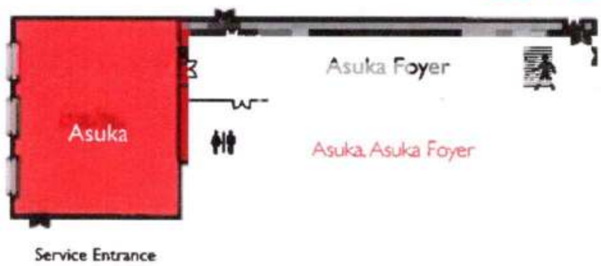


Neuchatel, Neuchatel Foyer, Genéve, Luzern, Zurich, GLZ Foyer

3 LEVEL 10

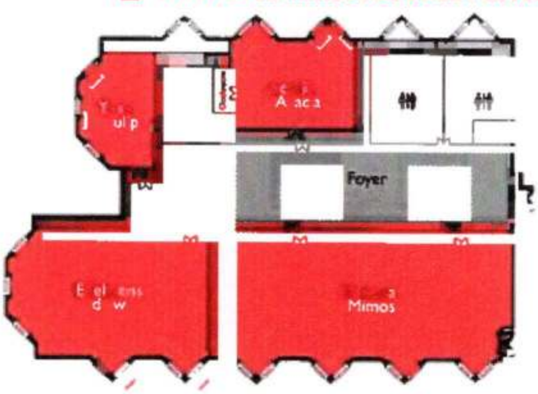
Eiger, Matterhorn, Jungfrau, Mont-Blanc, Monte Rosa, Chamonix Boardroom

LEVEL 7 4



Asuka, Asuka Foyer

5 SWISSOTEL RESIDENCE LOBBY LEVEL



Mimosa, Edelweiss, Acacai, Tulip

swissôtel THE BOSPHORUS
ISTANBUL

HOW TO GET AROUND THE HOTEL?

NEREYE, NASIL GİDİLİR?

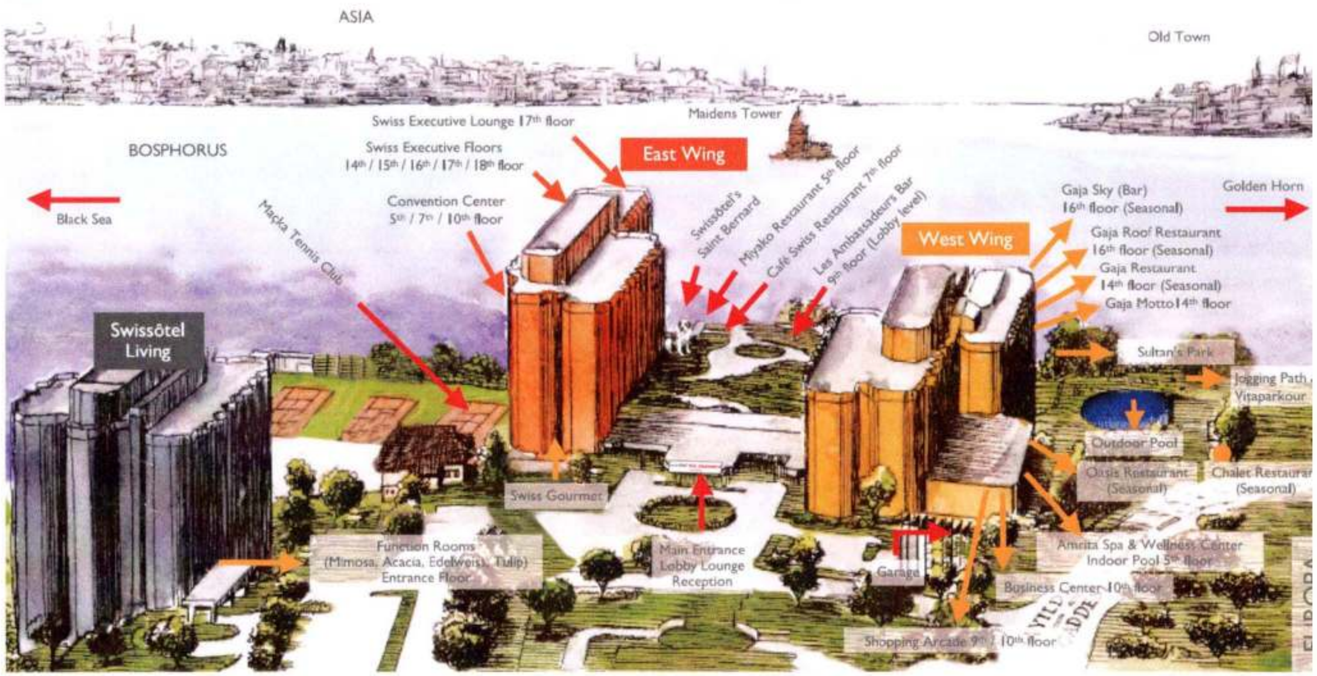
East Wing Function Rooms

Fuji Ballroom	Take East Wing elevators to the 5th floor. Follow the direction signage.
Lausanne, Montreux, Bern	Take East Wing elevators to the 5th floor. Follow the direction signage.
Neuchatel	Take East Wing elevators to the 7th floor. Follow the direction signage.
Genève, Luzern, Zurich	Take East Wing elevators to the 7th floor. Follow the direction signage.
Monte Rosa 1 Monte Rosa 2 Mönch Mont-Blanc Eiger Matterhorn Jungfrau Chamonix	Take East Wing elevators to the 10th floor. Turn right and follow the corridor or use the main stairs in the Shopping Arcade West Wing.

Swissôtel Living Function Rooms

Mimosa, Acacia, Edelweiss Tulip	Mimosa, Acacia, Edelweiss and Tulip meeting rooms are to the right of the Swissôtel Living Lounge.

swissôtel THE BOSPHORUS
ISTANBUL
Bayıldım Cad. No: 2 Maçka, Beşiktaş 34357 İstanbul - Türkiye
Tel (0 212) 326 1100 Fax (0 212) 326 1122



"Swissôtel at a glance"

Wednesday, July 10, 2013		
8:30am-8:00pm	Doctoral Consortium	Ozyegin University, Cekmekoy campus
4:00pm-7:00pm	Conference Registration	Swissotel
Thursday, July 11, 2013		
7:00am-5:00pm	Conference Registration	Swissotel
7:00am-5:00pm	Internet Café	Swissotel
7:30-8:30am	Continental Breakfast	Swissotel
*8:30-10:30am**	*ISMS Board Meeting*	*Swissotel*
8:30-10:00am	Session 1 (TA)	Swissotel
9:00am-3:30pm	Exhibit hours	Swissotel
10:00-10:30am	AM Break	Swissotel
10:30am-12:00pm	Session 2 (TB)	Swissotel
12:00-1:30pm	Lunch	Swissotel
12-1:30pm*	Women in Marketing Science Luncheon	Swissotel
1:30-3:00pm	Session 3 (TC)	Swissotel
3:00-3:30pm	PM Break	Swissotel
3:30-5:00pm	Session 4 (TD)	Swissotel
530-7:30pm	Opening Reception	Swissotel
Friday, July 12, 2013		
7:00am-5:00pm	Conference Registration	Swissotel
7:00am-5:00pm	Internet Café	Swissotel
7:30-8:30am	Continental Breakfast	Swissotel
8:30-10:00am	Session 1 (FA)	Swissotel
9:00am-3:30pm	Exhibit hours	Swissotel
10:00-10:30am	AM Break	Swissotel
10:30am-12:00pm	Session 2 (FB)	Swissotel
12:00-1:30pm	Lunch	Swissotel
*1-2:00pm**	*Marketing Science Editorial Board Meeting*	*Swissotel*
1:30-3:00pm	Session 3 (FC)	Swissotel
3:00-3:30pm	PM Break	Swissotel
3:30-5:00pm	Session 4 (FD)	Swissotel
5:30-7:00pm	Cocktails	Swissotel
*5:00-6:30pm**	*Marketing Science Associate Editors Reception*	*Swissotel*
7:00-9:30pm	Conference Gala Dinner	Swissotel

Saturday, July 13, 2013		
7:00am-1:30pm	Conference Registration	Swissotel
7:00am-3:00pm	Internet Café	Swissotel
*7:30-8:30am**	*Future Conference Committees Meeting*	*Swissotel*
7:30-8:30am	Continental Breakfast	Swissotel
8:30-10:00am	Session 1 (SA)	Swissotel
9:00am-12:00pm	Exhibit hours	Swissotel
10:00-10:30am	AM Break	Swissotel
10:30am-12:00pm	Session 2 (SB)	Swissotel
12:00-1:30pm	Lunch	Swissotel
*12:00-1:30pm**	*ISMS Fellows Lunch*	*Swissotel*
1:30-3:00pm	Session 3 (SC)	Swissotel
3pm	Conference closes	Swissotel
7pm-midnight	Dinner Cruise on Bosphorus	Optional: See Tours

2013 INFORMS Marketing Science Conference

Thursday, July 11th, 2013 8.30-10.00 (TA)

TA01 – Montreux **Digital Marketing Analytics** **Chair:** Shawndra Hill Completing the Virtuous Cycle between Paying for Music and Social Engagement in an Online Community: Evidence from a Randomized Trial *Ravi Bapna, Jui Ramaprasad, Akhmed Umyarov* Contracting for Content: A Model of Digital Goods Supply Chain *Ramnath K. Chellappa , Shivendu Shivendu* Estimating Cross Platform and Cross Device Synergies in Web and Mobile Advertising *Anindya Ghose, Sangpil Han, Sung Hyuk Park* An Empirical Examination of the Antecedents and Consequences of Information Hiding in Crowd-funded Markets *Gordon Burtch, Anindya Ghose, Sunil Wattal* Social TV: Using User Generated Content to Calculate Audience Affinity Networks for TV Shows and Brands *Shawndra Hill*	**TA02 – Lausanne** **Online Consumer Behavior** **Chair:** Hai Che The Impact of Emotions on Customer Behavior in Online Dating *Andrea Dechan, Anindya Ghos, Martin Spann* Music Streaming or Download?: Consumer's Demand for On-line Music Service *Hyowon Kim, Jaehwan Kim* Consumer Choice on Brand Website Visits: A Limited Consumer Search Approach *Jiyao Xun* Consumer's Bidding Behavior Under Online Group Buying Mechanism *Hai Che, Dan Zheng, Zhe Zhang*	**TA03 – Bern** **Social Networks and User Behavior** **Chair:** *Purush Papatla* Long Live the Fan: The Impact of Network Structure on Survival in the Music Industry *Jung Youn Lee, Minki Kim, Geonhyeok Go* Understanding the Structure and the Motivating Factors of Consumers' Social Media Participation *Ashish Kumar, Ram Bezawada* Do Privacy Controls Increase the Openness of Online Social Network Users? *Tuan Phan, Huseyin Cavusoglu* Succeeding in Extremely Competitive Markets: Insights from the Mobile App Market *Purush Papatla, Ruijiao Guo*	**TA04 – Monch** **Interfirm Contracting** **Chair:** Steven Seggie Stock Market Reactions to Technology Licensing Contracts *Erik Mooi, Stefan Wuyts* All for One, One for All: Governance and Bankruptcy in Franchisor-franchisee Relationships *Kersi D. Antia, Sudha Mani, Kenneth H. Wathne* Influence of Formal Contract Elements on Relational Behavior *Bjarte Ravndal* Why Asymmetric Relationships Don't Work: Empirical Evidence from Clustered Firms *Ragnhild Silkoset, Steven Seggie, Arne Nygaard*
TA05 – Montblanc **Marketing and Performance I** **Chair:** Srinivas Reddy Does the Market Believe in Marketing? A Text Mining Based Informational Value Perspective *Joseph Johnson, Deb Mitra* New Product Innovation and Financial Market Performance: Does the Nature of Institutional Investors *Sundar Bharadwaj, Atanas Nikolov, Guiyang Xiong* The Financial and Market Impact of Product Failure: A Case of Prescription Drug Withdrawals *Srinivas Reddy, Shekhar Sattiraju, Jason Zhang, Pradeep K. Chintagunta*	**TA06 – Monterosa 1** **Consumer Aspects of Design** **Chair:** Robert Kreuzbauer How Stages of Self-production Impact Consumers' Evaluation of and Relationship with Products *S. Sinem Atakan, Richard Bagozzi, Carolyn Yoon* Impact of Packaging Transparency on Product Preference *Meng Zhu, Darron Billeter, Jeff Inman* An Exploratory Study on Consumer's Esthetics Perception of Logo Design *Yu-Shan Athena Chen, Wei Hao Yang, Lien-Ti Bei* Natural Scarcity and Product Valuation *Robert Kreuzbauer, Dan King, Shankha Basu*	**TA07 – Monterosa 2** **Entertainment Marketing** **Chair:** Sanjay Sisodiya Role of Risk and Incentives in Contracting Between Movie Distributors and Exhibitors *Nina Baranchuk, Andrei Strijnev, David Switzer* Competitive Market Structure of Popular Music Industry *Joonhyuk Yang* Testing Resources Allocation and Their Effects on Firms' Performance: A Resource-advantage Theory Perspective in Sport *Aseel Al Ghamdi, Vinay Kanetkar* Why do Products Get Sequels? A Launch Decision Model with Risk Aversion *Florian Deutzmann, Dennis Fok, Stefan Stremersch* Timing of Line Extensions: An Investigation of Movie Sequels *Sanjay Sisodiya, Berna Devezer, Steve Shook*	**TA08 – Edelweiss** **Pricing Issues** **Chair:** Jonathan Seaton Should Event Organizers Prevent Resale of Tickets? *Ozge Sahin, Izak Duenya, Yao Cui* The Optimal Pricing of News Content *Adithya Pattabhiramaiah, S Sriram, Shrihari (Hari) Sridhar* Pricing in Inflationary Times: The Penny Drops *Jonathan Seaton, Ratula Chakraborty, Michael Waterson, Paul Dobson*

INFORMS Society of Marketing Science Board and Advisory Council

The Institute of Operations Research and Management Sciences (INFORMS) is an international, not-for-profit scientific society with 10,000 members, including Nobel laureates, dedicated to applying scientific methods to help improve decision-making, management, and operations. The Marketing Science Conference falls under the auspices of the INFORMS Society for Marketing Science (ISMS) sub-branch whose major purpose is to foster the development, dissemination, and implementation of knowledge, basic and applied research, and science and technologies that improve the understanding and practice of marketing.

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2013 INFORMS Marketing Science Conference

Thursday, July 11th, 2013 8.30-10.00 (TA)

TA09 – Mimosa

Customer Relations Management

Chair: Yantao Wang

A Conceptual Model to Measure Success of the Complaint Management of Companies
Ozan Penekligolu

How Relational Involvement Moderates Satisfaction Paradox under Competition? An Industrial Case
Che-Yu Cheng, Ming-Chih Tsai

Services Diffusion Under Internal and External Incentives
Tarek Ben Rhouma, Georges Zaccour

Some Customers Rather Leave Without Saying Goodbye
Eva Ascarza, Oded Netzer, Bruce Hardie

Beyond Sunk-Cost: How Commitment Contracts Influence Consumption
Yantao Wang, Florian Zettelmeyer, Eric Anderson

TA10 – EMBA 1

Brand Equity and Brand Management

Chair: Pascal Kottemann

20 Years of Brand Valuation – What Do We Learn from 24,000 Brand Values?
Alexander Himme, Marc Fischer

Sustained Growth- An Objective Customer-Market Measure of Brand Equity
Abas Mirzaei, David Gray, Chris Baumann, Hume Winzar, Lester W Johnson

From Hedonic-Utilitarian Value to Brand Loyalty: The Role of Brand Trust, Affect and Risk Aversion
Zeynep Sahinler, Elif Karaosmanoglu

Brand Concept Maps in Computer-aided Interview: Challenges, Benefits and Empirical Findings
Pascal Kottemann, Reinhold Decker, Martin Meissner

TA11 – EMBA 2

Piracy

Chair: Alexa B. Burmester

The Relationships Between Consumers' Usage of Experience Goods, Sales Performance, and Piracy
Hannes Datta, Dominik Papies, Bram Foubert

Cannibalization or Sampling? Quantifying the Quality of Piracy and its Effect on Experiential Goods
Anthony Koschmann

The Effect of Pre-release Movie Piracy on Box-office Revenue
Alan Montgomery, Param Singh, Liye Ma, Michael Smith

Accepting or Fighting Piracy - Can Piracy Be Reduced by Optimizing Timing & Pricing Strategies?
Alexa B. Burmester, Michel Clement, Felix Eggers, Tim Prostka

TA12 – Geneve

Store Brand Management

Chair: Erik Bushey

Managing Store Brands
Woochoel Shin, Wilfred Amaldoss

Private Label Tiers: A New Dimension of Competition between Private Labels and National Brands
Gizem Hokelekli, Lien Lamey, Frank Verboven

Spillover Effects, Private-Label Brands, and Category Profitability Enhancement
Mouna Sebri, Georges Zaccour

Suppliers Caught in Supermarket Price Wars: Victims or Victors?
Francesca Sotgiu, Katrijn Gielens

Retailer Introduction of Store Brands In the Presence of a Category Captain
Erik Bushey, Udatta Palekar

TA13 – Luzern

Daily Deals

Chair: Georgios Zervas

Consumer Regret and Choice Behavior under Uncertainty
Pavel Kireyev, Vineet Kumar, Xueming Luo

The Dynamics of Groupon: Repeat Purchase and Word-of-mouth after the Deep Discount
Ela Ari, Koen Pauwels

The Effects of SNS Affinity on the Sales Volume of Daily Deals in Korean Social Shopping Companies
Kyung Min Park, Bokyung Lee

The Groupon Effect on Yelp Ratings: A Root Cause Analysis
Georgios Zervas

TA14 – Zurich

Open Innovation

Chair: Abrar Al-Hasan

Does Customer Codevelopment Result in Better Products? Alignment with Product Development Approaches
Anna S. Cui, Fang Wu

An Adaptive Marketing Capabilities Perspective of Open Contribution During New Product Development
Gregory Fisher, William Qualls

How Would Success Depend on Social Media and New Product Development Process?
Basar Ozcan, Tolga Akcura

Rewarding the Few or the Many? An Investigation of the Impact of Rewards on Open Innovation
Pinar Yildirim, Reto Hofstetter, John Zhang

Information Spillovers and User Behavior in Open Innovation Contests
Abrar Al-Hasan, Siva Viswanathan, Il-Horn Hann

2013 INFORMS Marketing Science Conference

Thursday, July 11th, 2013 10.30-12.00 (TB)

TB01 – Montreux

Data-Driven Customer Relationship Management

Chair: Aurelie Lemmens

~~CLV Model using RFM Data: Acquisition Strategy and Retention Tactic with Marketing ROI~~
~~*Makoto Abe*~~

Incorporating History Dependence in Models of CBA: A Generalization of the (M)BG/NBD Model
Jost Adler

Managing Churn to Maximize Profits
Aurelie Lemmens, Sunil Gupta

~~The Effect of Service Quality on Customer Lifetime Value~~
~~*Michael Braun, David Schweidel, Eli Stein*~~

TB02 – Lausanne

User-Generated Content – I

Chair: Manish Tripathi

Microblogging Characteristics and Branding
Eser Aygün, Tolga Akcura

A Diffusion Model of Microblogging and Branding
Tolga Akcura

Effects of Peer Opinions and Customer Opinions on Critic Evaluations of Cultural Products
Xia Liu, Peter Golder, Jun Pang

A Comprehensive Model of Brand-generated and Consumer-generated Communications
Manish Tripathi, Douglas Bowman

TB03 – Bern

e-Marketing Potpourri

Chair: Umut Konus

Customer Co-Creation in Health Care Services: The Development of a Scale to Measure Cure and Care
Sarah Van Oerle, Annouk Lievens, Dominik Mahr

Methods for Simulation, Optimization and Digital Attribution of Cross-media Marketing Spend
Mert Bay

Consumer Impatience and Market Structure: The Case of Online Pizza Delivery
Elisa Montaguti, Federico Rossi, Sara Valentini

Multi-Touchpoint Segments in Relational Contexts: A Real-time Experience Tracking Approach
Umut Konus, Emma Macdonald, Hugh Wilson

TB04 – Monch

Bayesian Methods in Marketing

Chair: Refik Soyer

Studying Cross Category Effects of Promotions using Bayesian Networks
Srinivas Prasad

The Drivers of Product Modification Cycles: A Bayesian Approach
Tevfik Aktekin, Goksel Yalcinkaya, Sengun Yeniyurt

A Dynamic Bayesian Network Approach to Market Basket Analysis
Bumsoo Kim

Semi-Parametric Bayesian Models for Call Center Demand
Refik Soyer, Francesca Ieva, Murat Tarimcilar

TB05 – Montblanc

Marketing and Performance II

Chair: Xiaoyun Chen

Exploring the Different Incarnations of Market Orientation in Contemporary Business Models
Mikko Laukkanen, Johanna Frösén, Esa Saarelainen

Too Much of a Good Thing: How Does Good Reputation Affect a Firm's Market Value?
M. Berk Talay, Billur Akdeniz

When Does Distribution Defy Scale? An Examination of Retail, Wholesale, and the Performance Ditch
Can Uslay, Ekaterina Karniouchina

When Does Imbalance between Exploration And Exploitation Enhance Performance? A Contingency View
Xiaoyun Chen, Jie Wu, May Wang

TB06 – Monterosa 1

Branding and Firm Performance

Chair: Xueming Luo

The Impact of Brand Rating Dispersion on Firm Value
Xueming Luo, Sasha Raithel, Michael Wiles

Corporate Social Performance, Brand Equity, and Shareholder Value
Saurabh Mishra, Sachin B. Modi

Brand Analysis and Strategy from Online Chatter
Seshadri Tirunillai, Gerald J. Tellis

Disclosure of Advertising Expenditure: An Indicator of Business Strategy
Leigh McAlister, Niket Jindal, Albert A. Cannella, Jr., Raji Srinivasan

TB07 – Monterosa 2

Two-Sided Markets

Chair: Masakazu Ishihara

Charging for Ad Impact on Viewer Experience: Marketplace Dynamics and Pareto Efficiency
Valeria Montero, Eric Bax

Content Quality in Media Markets
Taylan Yalcin, Elie Ofek, David Godes

Daily Deal Websites in Markets with Asymmetric Information
Tansev Geylani, Mark Bender, Esther Gal-Or

Two Sided Piracy
Masakazu Ishihara, Eitan Muller

TB08 – Edelweiss

TARIFFS

Chair: Christian Schlereth

Bundling Consumers: A Strategic Rationale for Family Plans
Debu Purohit, Preyas Desai, Bobby Zhou

Play it Save: Consumer Choice under Four-part Tariffs with Cost Caps
Philip Koehler, Jan Kraemer

Profit Maximising Contract Plans
Christian Schlereth, Siham El Kihal

2013 INFORMS Marketing Science Conference

Thursday, July 11th, 2013 10.30-12.00 (TB)

TB09 – Mimosa **Event Marketing and Sport Sponsoring** **Chair:** Vijay Viswanathan Sponsorship vs. Ambush Marketing – A Field-Experimental Comparison of Communication Effectiveness *Regina-Viola Frey, Dirk Zupancic, Markus Schwarzer, Marion Büttgen* Does Winning Lead to Cross Promotion? *Doug J. Chung* The Long-term Effectiveness of Superbowl Advertising *Vijay Viswanathan*	**TB10 – EMBA 1** **Brand Strategy** **Chair:** Valentyna Melnyk An Assortment-Centric Approach to Manage Brands under Competitive Set Variation *Piyush Kumar, Mayukh Dass* Co-Creation in Corporate Rebranding *Polina Landgraf* Brand Consistency in Consumer Packaged Goods *Harry Antonio, Douglas Bowman* Effectiveness of Different Brand Positioning Strategies across the World *Valentyna Melnyk, Yvonne van Everdingen, Ralf van der Lans*	**TB11 – EMBA 2** **Choice Modeling in Retail Settings** **Chair:** Kathryn Sharpe An Analysis of Assortment Choice in Grocery Retailing *Kyuseop Kwak, Sri Duvvuri, Gary Russell* An Empirical Analysis of Consumer Search Behavior in the U.S. Retail Banking Sector *Maria Ana Vitorino, Elisabeth Honka, Ali Hortacsu* When Franchisee Effort Affects Demand: An Application to the Car Radiator Market *Tongil Kim* Understanding Consumer Response to Within-Chain Price Shock *Kathryn Sharpe, Oded Netzer, Joel Huber* Using In-store Video and RFID Tracking to Explicate Unplanned Consideration and Purchase Conversion *Jeff Inman, Yanliu Huang, Sam Hui, Jacob Suher*	**TB12 – Geneve** **Promotion** **Chair:** Serdar Sayman A New Mechanism to Understand Consumer Redemption Behavior *Kissan Joseph, Zelin Zhang, Minghui Ma* Designing Multi-brand Promotions as Commercial Innovations *Jochen Reiner, Martin Natter* Measuring the Effect of Cross Promotions: The Case of the Motion Picture Industry *Bharat Sud, Salma Karray, Kamal Smimou* A Theory of Retailer Price Promotions using Economic Foundations *Kurt Jetta* Buying Repeatedly or Using for a Long Time? Price and Non-price Promotion Effectiveness on Hedonic and Utilitarian Products *Serdar Sayman, Selin Erguncu*
TB13 – Luzern **Managing Online Operations** **Chair:** Kitty Wang Familiarity with Destination and Information Requirements. Criteria for Hotel Websites' Design *Ruben Huertas-Garcia, Juan-Carlos Gázquez-Abad, Irene Esteban-Millat, Francisco J. Martínez-López* Retailer Return Management: Combining Product and Customer Information to Maximize Profit *Siham El Kihal, Christian Schulze, Bernd Skiera* Social Media Marketing Trends in Turkey: A Profile Analysis of Turkish Corporations *Mina Seraj, Aysegul Toker* Task Facilitative Tools and Choice Goals: A Process-view Study of e-Stores *Prithwiraj Nath, Sally McKechnie* Understanding the Value of Online Channels: An Investigation of the Online vs. Offline Interactions *Kitty Wang, Avi Goldfarb*	**TB14 – Zurich** **Innovation Management** **Chair:** P.V. (Sundar) Balakrishnan Strategically Sequencing Major and Minor Innovations *Timothy Heath, Thorsten Hennig-Thurau, Bruno Kocher, Max Chauvin, Subimal Chatterjee, Suman Basuroy* A Demand-Side Framework for Incumbent Inertia and Innovativeness *Jonathan Bohlmann, Francisco-Jose Molina-Castillo, Jelena Spanjol, Michael Stanko* Why Peripheral Innovations May Have Higher Adoption Intentions than Core Innovations *Tripat Gill, Zhenfeng Ma, Ying Jiang* Waiting for the iPhone? Production Constrained Diffusion of Innovation *P.V. (Sundar) Balakrishnan, Surya Pathak*		

2013 INFORMS Marketing Science Conference

Thursday, July 11th, 2013 1.30-3.00 (TC)

TC01 – Montreux **Profitable Modeling of the Customer Database** **Chair:** Arnaud De Bruyn Improving Decision Tree Segmentation through Leaf Modeling for Direct Marketing *Kristof Coussement* Modeling Unobserved Drop-out Rate to Optimize e-Panelist Lifetime Value *Alina Ferecatu, Arnaud De Bruyn, Prithwiraj Mukherjee* Predicting Music Rank and Sales using Big Social Data *William Rand, Derek Monner, Yogesh V. Joshi* Bayesian Profiling of Customers using Census Bureau Data *Arnaud De Bruyn, Thomas Otter*	**TC02 – Lausanne** **User-Generated Content – II** **Chair:** Chun-Yao Huang A Study of the Effect of Online Review Reward on Information Richness and Sentiment Expression *Lu Wang, Jingwen Chen, Shan Zhao* Impact of Monetary Reward Program on Consumers' Online Product Reviews *Jun Pang, Lingyun Qiu* ~~Naive or Savvy: How Credible are Online Reviews for Credence Services?~~ ~~*Shannon Lantzy, Katherine Stewart, Rebecca Hamilton*~~ Predicting the Co-evolution of Digital Content and Its Consumer Generated Reviews *Chun-Yao Huang*	**TC03 – Bern** **Social Media Marketing** **Chair:** Wei Zhang ~~A High Dimensional Dynamic Factor Model for Digital Marketing~~ ~~Harpreet Singh, Nitin Das, Prasad Naik~~ Social-media Experiment for Developing Marketing Strategy of Old Media Against New Media *Akihiro Inoue, Kihiro Nishimoto, Atsuhiko Iino* Social Media Marketing and Consumer Demand: A Field Experiment *Shiyang Gong, Juanjuan Zhang, Yubo Chen, Ping Zhao, Xuping Jiang* Crisis Management in Social Media Era – The Mechanism of PR Crisis Driven by Weibo *Wei Zhang, Cheng Zhang*	**TC04 – Monch** **Modeling Facial Expression in Advertising and Media** **Chair:** Thales Teixeira Inferring Viewer's Preferences toward Ads through Facial Expression and Eye Gaze *Li Xiao, Min Ding* Face-Tracking Recommendation System Applied to Comedy Movie Trailers *Xuan Liu, Michel Wedel, Thales Teixeira* Why, When and How Much to Entertain Consumers in Advertisements? A Webbased Facial Tracking Field Study *Pana Turcot, Thales Teixeira, Rosalind Picard, Rana el Kaliouby* Applications of Face-Tracking in Industry *Jay Turcot*
TC05 – Montblanc **Marketing and Performance III** **Chair:** Christine Moorman Market Orientation-Corporate Brand Performance Relationship in Indian B2B Firms: A Bayesian Analysis *Subhashish Chakravarty, Soumya Sarkar* Competing on Sustainability: Sustainability Attributes and Their Effect on Performance *Omar Rodriguez-Vila, Sundar Bharadwaj* Configuring Marketing Capabilities for Superior Firm Performance in Different Business Contexts *Matti Jaakkola, Johanna Frösén* What Doesn't Kill You Makes Your Brand Introduction Strategy Stronger: Why Firms Benefit from Adversity *Christine Moorman, Stav Rosenzweig, Vivian Yue Qin, Amir Grinstein*	**TC06 – Monterosa 1** **New Frontiers in Consumer Heuristics** **Chair:** Joseph Goodman **Co-Chair:** Selin A Malkoc Giving it the Benefit of the Doubt? When No-review is a Good-review *Selin A. Malkoc, Simona Botti, Ayelet Gneezy* One of Each: Variety Seeking to Avoid Choice Difficulty *Joseph Goodman, Kathleen Vohs* The Effect of Product Shape Closure on Size Estimations, Preference, and Consumption *Barbara E. Kahn, Julio C. Sevilla* ~~The Willingness to Accept Automated Recommendations Based on Preferences of the Self and Preferences of Others~~ ~~*Donna L. Hoffman, Randy Stein, Thomas P. Novak*~~	**TC07 – Monterosa 2** **Marketing for the Greater Good** **Chair:** Gauri Kulkarni Memory Imperfections and Messaging Strategy *Raghunath Rao, Om Narasimhan, Xiaolin Li* Understanding Choice Behavior in Political Marketing Context: A Favorable Voter Response Model *Oguzhan Aygoren, Cengiz Yilmaz* Any News is Good News: The Impact of Enduring and Situational Involvement on Charitable Giving *J. Andrew Petersen, Tarun Kushwaha* Reverse Use of Customer Data - Harnessing the Power of Customer Data for the Benefit of the Customer *Gauri Kulkarni, Hannu Saarijärvi, P. K. Kannan, Hannu Kuusela*	**TC08 – Edelweiss** **Willingness to Pay** **Chair:** Robert Wilken Are People Willing to Pay More for Social Goods? A Meta-analysis *Russ Winer, Stephanie Tully* Shades of Love: Effect of Ownership Type on Object Valuation *Charan Bagga, Neil Bendle, June Cotte* The Impact of Stress and Level of Construal on Willingness to Pay *Erik Maier, Robert Wilken* The Influence of Uncertainty on Willingness-to-pay and Willingness-to-pay Ranges *Robert Wilken, Erik Maier*

2013 INFORMS Marketing Science Conference

Thursday, July 11th, 2013 1.30-3.00 (TC)

TC09 – Mimosa

Advertising, Ethics and Culture

Chair: Kim Serota

Religious Orientation: How Do Religious Beliefs and Gender Influence What we Buy?
Sridhar Samu, Melarkode G Parameswaran

Marketing of Halal Food and Shopper Behavior in Germany: An Empirical Case Study on Ethnic Marketing
Volker Trauzettel

Truth Bias and the Detection of Marketing Deception
Kim Serota, Timothy Levine

TC10 – EMBA 1

Brand Depth and Brand Crisis

Chair: Yuxuan Zhang

Understanding the Strategic Implications of Brand Depth and Breadth
John Roberts, Pam Morrison, Songting Dong

The Role of Brands in Extended Service Contract (ESC) Purchase Decisions
Moein Khanlari Larimi, Paul R. Messinger

Brand Equity as a Mediator of the Corporate Social Performance – Corporate Brand Performance Link
Nima Mehrafshan, Alexander Permann, Mark Heitmann

Study of the Heterogeneous Impact of Product-harm Events on Brand Equity: Findings and Implications
Yuxuan Zhang, Kristiaan Helsen

An Investigation of Consumer Responses to Global Brand Crisis
Lianxi Zhou, Alain D'Astous

TC11 – EMBA 2

Customer Loyalty

Chair: Sudhir Voleti

Loyalty Programs: Reward or Rip-off?
Peter Danaher, Laszlo Sajtos

New Insights on the Relationship between Customer Satisfaction and Loyalty
Nadine Schirmer, Christian Ringle

Present Loyalty: Theory and a Behavior-Based Measurement Method
Songting Dong, Ping Zhao, Deqiang Zou, Min Ding

Predicting Customer Value and e-channel Disposition from Cross-sectional Survey Data
Sudhir Voleti, Sundar Bharadwaj

TC12 – Geneve

Meet the Editors I

Editors of leading journals for marketing academics will present their editorial policies and perspectives. The following editors are represented: Marketing Science: Preyas Desai; Journal of Marketing Research: Bob Meyer; Journal of Marketing: Jeff Inman; Journal of Consumer Research: Brian Ratchford; Management Science: Kannan Srinivasan.

TC13 – Luzern

Advertising and Price Sensitivity

Chair: Shuba Srinivasan

Price Advertising Offline Products with Online Competition
Ying Xiao, Bing Jing

Allocating Spend on Digital Display Advertising: Investigating Attributable ROI
Nazrul I. Shaikh, Niva Shrestha, Mahima Hada

Advertising's Impact on Price Sensitivity: How Do the Brand's Mindset Metrics Matter?
Shuba Srinivasan, Berk Ataman, Koen Pauwels, Marc Vanheule

The Whole-number Processing Bias: Investor Sentiments and Changing Stock Prices
Ashwin Malshe, Subimal Chatterjee

TC14 – Zurich

Sustainable Innovation

Chair: Hossein Eslami

Sustainability Orientation: Drivers and Innovation and Performance Outcomes
Rosanna Garcia, Scott Dacko, Marius Claudy, Sarah Wilner

Cultural Influences on the Usage of Reusable Products: A Cross-country Analysis
Myung-Soo Jo, Rong Huang, Emine Sarigollu

Social Responsibility and Product Innovation
Ganesh Iyer, David Soberman

Structural Model of New Technology Adoption with Uncertain Payoff: The Case of Solar Panels
Hossein Eslami, Trichy Krishnan, Surendra Rajiv

2013 INFORMS Marketing Science Conference

Thursday, July 11th, 2013 3.30-5.00 (TD)

TD01 – Montreux

Customer Base Analysis

Chair: Shanfei Feng

Since You Have Been Gone - Customers Win-back
Ann-Christin Langmaack, Michel Clement, Edlira Shehu

Customer Base Analysis in Social Networks: A Structural Model
Xi Chen, Ralf van der Lans, Michael Trusov

An Empirical Investigation of Interaction between Vertically Differentiated Channels: Case of Factory Outlet Stores and Retail Stores
Gonca Soysal

Get Lapsed Donors Back: Assessing Marketing Effectiveness in Post-Termination Stage
Shanfei Feng

TD02 – Lausanne

User-Generated Content - III

Chair: Daniela Baum

Using UGC Traffic for PGC Monetization
Inyoung Chae, Paddy Padmanabhan, Theodoros Evgeniou, Kaifu Zhang

Managing the Crowd: Prize Structure and Creativity in Online Idea Generation Contests
Johanna Slot, Raji Srinivasan, Stefan Wuyts

Investigating the Interplay between Online Consumer Reviews and Recommender Systems
Daniela Baum, Martin Spann

TD03 – Bern

Social Media

Chair: David Schweidel

The Art Marketing and Art Management Adapting the Mathematical Model of the Hit Phenomenon
Kawahata Yasuko, Ishii Akira

Is a 'Social' Media Future Anti-Social?
Mark Kilgour, Sheila Sasser, Chelsea Lockwood

TD04 – Monch

Panel Session: Modelling the Behavior of Decision Makers: Structural Models, Agent-Based Models, Bayesian Models and Beyond

Moderator: Rosanna Garcia

Modelling the Behavior of Decision Makers: Structural Models, Agent-based Models, Bayesian Models and Beyond
Panelists: Rosanna Garcia, Tulin Erdem, Eitan Muller, Peter Fader

TD05 – Montblanc

Emerging Markets and Beyond

Chair: Patrick Poon

~~Market Drivers in an Emerging Economy~~
~~*Lancy Mac, Felicitas Evangelista*~~

How Consumers' Subjective Knowledge Shapes Preferences in an Emerging Market: The Chinese Car Market
Lixian Qian, Didier Soopramanien

Country of Market Effect in China
Shenyu Li, Rong Huang, Siva K. Balasubramanian

Consumer Animosity and Brand Country Association: A Study of Chinese Consumers
Patrick Poon, Lianxi Zhou, Chun Zhang

TD06 – Monterosa 1

Online Consumer Behavior

Chair: Selin Germirli-Yerebakan

Impact of the Negative Online Reviews on Consumer Purchase Intention: Based on the Product Information
Jing Qiu, Yan Xinliu

A Study of the Effectiveness of Online Scarce Promotion —Comparison of Planned and Unplanned Buying
Xishu Zheng, Nian Liu, Li Zhao

Social Shopping Motivation: An Exploratory Study
Selin Germirli-Yerebakan

TD07 – Monterosa 2

Marketing Metrics

Chair: Ofer Mintz

A Dynamic Multilevel Structural Equation Model of Key Performance Metrics
Joonwook Park, Seoil Chaiy, Seokoo Lee, William Dillon

Contributions of Quantity and Quality of Marketing Expenditures on Firm Performance
Eric Eisenstein, George Chressanthis

International Managers Metric Use: Antecedents, Consequences, and Contrasts with U.S. Managers
Ofer Mintz, Imran Currim

There is No Single Best Measure of Your Customers
Evert de Haan, Peter Verhoef, Thorsten Wiesel

TD08 – Edelweiss

Dynamic Pricing I

Chair: Lu Qiang

Advance Selling When Consumers are Heterogenous
Xubing Zhang, Yulan Wang, Bo Jiang

Advance Versus Spot Selling with Consumer Anticipation
Rajiv Sinha, Fernando Machado

Dynamic Pricing of Seasonal Goods: An Empirical Investigation into Optimal Price Paths
Shantanu Mullick, Nicolas Glady

Dynamic Pricing with Evaluation Cost
Lu Qiang, Wei-yu Kevin Chiang

2013 INFORMS Marketing Science Conference

Thursday, July 11th, 2013 3.30-5.00 (TD)

TD09 – Mimosa **Advertising Creativity and Ad Content** **Chair:** Leo Paas How Advertising Creativity Interacts with Brand Strength: A Field Study and Eye Tracking Experiment *Scott Koslow, Ahmed Al-Shuaili, Mark Kilgour, Sheila Sasser* Application of Elaboration Likelihood Model to Single Source Data to Forecast Behavioral Transition *Satoshi Nakano, Fumiyo Kondo* Fashion Followers Prefer Moderately Thin Models: Moderating the Quadratic Effect of Model Body Size *Leo Paas, Denise M. Janssen*	**TD10 – EMBA 1** **Brand Equity and Brand Performance** **Chair:** Natalie Mizik Brand Equity Estimation Model: An Integration of Consumer and Financial Perspectives *Marta Olivia Rovedder de Oliveira, Cleo Silveira, Fernando Luce* Mergers and Brand Equity: A Quantitative Analysis of Strategic and Efficiency Motives *Yanlai Chu, Junhong Chu, Hongju Liu* The Financial Performance Impact of Customer MindSet Brand Equity: Only 10% is Current-year and 90% *Natalie Mizik*	**TD11 – EMBA 2** **Customer Satisfaction** **Chair: Edward Malthouse** A Meta-analysis on Finding an Adequate Compensation Type for Recovering from a (Service) Failure *Holger Roschk, Katja Gelbrich* Do Customer Satisfaction Ratings Matter? *Jihoon Cho, Anocha Aribarg, Puneet Manchanda* Firms Costs and Customer Satisfaction *Rajdeep Grewal, Kapil Tuli* Perceptions Are Relative: Relationship between Relative Satisfaction Metrics and Share of Wallet *Edward Malthouse, Lerzan Aksoy, Alexander Buoye, Bruce Cooil, Arne DeKeyser, Tim Keiningham, Bart Larivière*	**TD12 – Geneve** **Meet the Editors II** Editors of leading journals for marketing academics will present their editorial policies and perspectives. The following editors are represented: Quantitative Marketing and Economics: Sridhar Moorthy; International Journal of Research in Marketing: Eitan Muller; Journal of Retailing: Praveen Kopalle; Journal of Service Research: Roland Rust.
TD13 – Luzern **Measurement** **Chair:** Thomas Reutterer Marketing Research using IVR vs. Human Operators: An Empirical Analysis *Sergio Meza, Andres Acevedo, Patricia Ross* Using Pre and Post Attitudinal Data to Explore Learning in Instructional Marketing Games *Larry Garber, Unal Boya, Bibek Banerjee* ~~Estimation of Average Treatment Effects using Panel Data: Theory and Application~~ ~~*Kathy Li, David R. Bell*~~ Structural Modeling with Graphical Models *Thomas Reutterer, Kathrin Gruber*	**TD14 – Zurich** **Innovation and Competition** **Chair:** Sue Ryung Chang Effect of New Product Introduction and Cannibalization for Multi-Brand Companies *Xin-Yu Zou, René Algesheimer, Florian Stahl* Quality and Quality Claims: The Impact of Competition and the Cost of Overstating Quality *Praveen Kopalle, Don Lehmann* Timing of New Product Release in the Presence of Competition *Mahmood Pedram* Repositioning by Relaunch: How Does Relaunch Affect Consumer Perception & Internal Market Structure? *Sue Ryung Chang, Tulin Erdem*		

2013 INFORMS Marketing Science Conference

Friday, July 12th, 2013 8.30-10.00 (FA)

FA01 – Montreux

Mobile and Social Networks

Chair: Manish Gangwar

Pro-Social Behavior in Mobile Networks
Jayson Jia, Jianmin Jia, Xianchi Dai

A Structural Model of User Learning and Multi-category Usage for Mobile Social Network Application
Dai Yao, Hernan Bruno, Lizhen Xu

Mobile Telephone Pricing: Contrasting India with USA
Manish Gangwar, Hemant Bhargava

FA02 – Lausanne

Online Advertising

Chair: Michaela Draganska

The Effect of Online Banner Advertising on Offline Sales
Lara Lobschat, Werner Reinartz, Ernst Osinga

A Dynamic Model for Digital Advertising: The Effects of Ad Formats and Message Content
Norris Bruce, B.P.S. Murthi, Ram Rao

Beyond the Last Ad: Attribution in Online Advertising
Ron Berman

Internet vs. TV Advertising: A Brand-Building Comparison
Michaela Draganska, Wesley Hartmann

FA03 – Bern

Strategic Consumer and Firm Decisions in Oligopolistic Markets: Session 1

Chair: Stephan Seiler

Co- Chair: Ahmed Khwaja

A Dynamic Equilibrium Analysis of Firm Expansion, Productivity, and Market Structure
Ahmed Khwaja, Jason Blevins, Nathan Yang

Innovation Equity
Ron N. Borkovsky, Ron Goettler, Avi Goldfarb, Brett R. Gordon

Oblivious Equilibrium for Concentrated Industries
Przemyslaw Jeziorski, C. Lanier Benkard, Gabriel Y. Weintraub

FA04 – Monch

Optimal Pricing Decisions

Chair: Yesim Orhun

Countercyclical Pricing: A Consumer Heterogeneity Explanation
Ali Umut Guler, Kanishka Misra, Naufel Vilcassim

Asymmetries and Dynamics of Cost Pass through in the U.S. Milk
Kanishka Misra, Romana Khan, Vishal Singh

The Value of Price Information: The Case of Italian Highways
Federico Rossi, Pradeep K. Chintagunta

New Service-class Introduction: What Price Takes-off?
Yesim Orhun

FA05 – Montblanc

Pricing in the Channel

Chair: Chunming Shi

Distribution Channel Prices and Pass-Through with Reference-dependent Demand
Hernan Bruno

A Structural Model of Price and Inventory Competition between Automobile Dealers
S. Siddarth, Jorge Silva-Risso, Dinakar Jayarajan

Quantity and Price Comeptition Between Aymmetric Channels
Chunming Shi

~~Periodicity of Pricing and Marketing Efforts in a Distribution Channel~~
~~*Salma Karray*~~

FA06 – Monterosa 1

Context Dependent Choices

Chair: Liang Guo

How Numeric Framing Affects Risk Perceptions and Behavioral Intentions
Nevena Koukova, Joydeep Srivastava

Please Don't Tell Me, I Don't Want to Know it in Detail - Framing and Perception of Increased Prices
Timo Zagel, Martina Steul-Fischer

Choice Overload Problem under Context Dependent Presences
Namil Kim, Wonjoon Kim

Contextual Deliberation and Preference Construction
Liang Guo

FA07 – Monterosa 2

Health Marketing I

Chair: Sachiko Ohno

The Dynamic Impact of Nutritional Innovations on Healthy Food Sales
Marcel Kornelis

The Effectiveness of the Tobacco Display Ban in Canada: A Field Study
Srabana Dasgupta, Tirtha Dhar

The Ideal Beauty Effect on the Overweight Epidemic – Theory and Evidence
Daniel Shapira, Amir Heiman, Oded Lowengart

An Emotional-Psychology Approach to Explanation of Adoption of High-risk, High Involvement Service
Sachiko Ohno, Akihiro Inoue

~~What Do We Know about the Food We Are Eating? The Effectiveness of Nutrition Labelling~~
~~*Satheesh Seenivasan, Dominic Thomas*~~

FA08 – Edelweiss

Dynamic Pricing II

Chair: Aras Alkis

Dynamic Targeted Pricing
Chuan He, Dan Zhang

Seasonality in Dynamic Consumer Inventory Models
Avery Haviv

How Consumer Response To Changing Prices Vary With Regulatory Foci: Loyals vs "Loyals"
Aras Alkis

2013 INFORMS Marketing Science Conference

Friday, July 12th, 2013 8.30-10.00 (FA)

FA09 – Mimosa

Ad Targeting and Shared Consumption

Chair: Sebastiano Delre

Retargeting as Mean to Speed up Online Shopping Momentum
Isabelle Kes, David M. Woisetschlaeger, Christof Backhaus, Alexander Eiting

Cookies' Best Before End – The Impact of Cookie Deletion on Advertising Effectiveness
Alexander Eiting, Isabelle Kes, David M. Woisetschlaeger

Measuring Attention to Advertising: A Comparison of Gaze Duration and Duration of Page Exposure
Kaye Chan, Mark Uncles

Let's Go Together: Modeling the Effects of Shared Consumption Experience on the Success of Movies
Sebastiano Delre, Thijs Broekhuizen, Tammo Bijmolt

FA10 – EMBA 1

Branding and Consumer Behavior

Chair: Esra Arikan

How Fans' Engagement into Facebook Brand Fan Pages Influences their Behaviors Towards Brands?
Laurent Flores, Karine Raïes

Mere-alignability of Alphanumeric Brand Names: When Exposure to Mercedes Affects Choice between BMWs
Berna Devezer, Kunter Gunasti

Category Variety Seeking and Brand Variety Seeking in the US Snacks Market
B.P.S. Murthi, Ram Rao, Marina Girju

Expanding the Boundary of Brand Extensions through BRQ: The Influence of Style of Thinking
Esra Arikan

The Moderating Effect of Customer Engagement on the Brand Image - Customer Equity Relationship
Goetz Greve, Katrin Hinkelmann

FA11 – EMBA 2

Group and Context Effects in Choice Modeling

Chair: Sotaro Katsumata

Incorporating Group and Individual Dynamics in Group Choice Models
Sam Riethmuller, Ujwal Kayande

A New Model of Context Dependent Choice
Prithwiraj Mukherjee, Ayse Onculer

A Two-stage Decision Model of Mobile Phone Choice: A Social Network and Service Perspective
Yuho Chung, Jianmin Jia

Random Regret Minimization for Consumer Choice Modeling: Assessment of Empirical Evidence
Thijs Dekker, Caspar Chorus

The Experiential Set Choice Model Based on a Heterogeneous Knowledge Structure of Consumers
Sotaro Katsumata, Makoto Abe, Akihiro Nishimoto

FA12 – Geneve

Decision Making

Chair: Silu Yu

Cross-cultural Differences in Price Search Decisions
Suppakron Pattaratanakun, Vincent Mak

Exploring Context Effects with Consumer Mindset Data Across Cultures
Selin Erguncu

Projection Bias in the Car Market
Jorge Silva-Risso, Devin Pope, Jaren Pope, Meghan Busse

An Empirical Study of the Positive and Negative Effects of Online Service Guarantee
Silu Yu, Xueni Li, Xiaoling Li

FA13 – Luzern

Finance and Marketing I: The Team

Chair: Stefan Worm

The Role of CEOs' Self-regulatory Orientation in Defining a Firm's Business Performance
Johanna Frösén, Cecile Cho

Liability of Middleness: The Moderating Role of CEO Attributes
Xiaoyu Zhou, Xiaomeng Du

The Productivity Trap: Punishing the CMO for Satisfying Customers
Ming-Hui Huang

The Value Relevance of Top Management Team Marketing Attention
Stefan Worm, Jialie Shen, Sundar Bharadwaj

FA14 – Zurich

New Product Adoption

Chair: Emmanuelle Le Nagard

Adoption and Rejection of New Consumer Durables: A Goal-Directed Approach
Remco Prins, Ruud Frambach

Consumer Disadoption of Old Technologies: The Case of Fixed to Mobile Substitution
Ralitza Nikolaeva

How to Sell Smart Grid Appliances: Addressing the Right Needs of Decision-Makers
Benedikt Römer, Philipp Reichhart, Arnold Picot

The Resistance to the Adoption of a New Sales Force Automation System
Emmanuelle Le Nagard, Niek Althuizen

2013 INFORMS Marketing Science Conference

Friday, July 12th, 2013 10.30-12.00 (FB)

FB01 – Montreux

Social, Mobile, and Local

Chair: Peter Pal Zubcsek

Mobile Targeting: How Timing, Location, and Personalization Matter
Michelle Andrews, Xueming Luo, Chee Wei Phang, Zheng Fang

Effectiveness of Location-Based Advertising: A Randomized Field Experiment Comparing PC with Mobile
Dominik Molitor, Anindya Ghose, Martin Spann, Philipp Reichhart

Social and Location Effects in Mobile Advertising
Peter Pal Zubcsek, Zsolt Katona, Miklos Sarvary

FB02 – Lausanne

Online Word-of-Mouth

Chair: Liwu Hsu

Generalized Model of Advertising: Incorporating Electronic Word-of-mouth Into Advertising Model
Yana Ponomarova, Nicolas Glady

Birth and Death of eRumors
Yutaka Hamaoka

The Effect of Groupon Deals on Online Word of Mouth
Yue Wu, Kaifu Zhang, Yakov Bart, Theodoros Evgeniou, Paddy Padmanabhan

Online Word-of-Mouth and Firm Value During a Product Recall Crisis
Liwu Hsu, Shuba Srinivasan

FB03 – Bern

Strategic Consumer and Firm Decisions in Oligopolistic Markets: Session 2

Chair: Przemyslaw Jeziorski

Co- Chair: Ahmed Khwaja

Firm Learning and Equilibrium Selection: An Application to Retail Price Competition in the Milk Category
Brett R. Gordon, Ron N. Borkovsky

Free to Choose? Reform and Demand Response in the English National Health Service
Stephan Seiler, Martin Gaynor, Carol Propper

Retail Entry in a Multi-brand Environment: Empirical Analysis of Cross-channel Revenue Effects
Scott Shriver, Bryan Bollinger

An Equilibrium Analysis of the Effect of Consumer Brand Equity on Firm Brand Profitability
Raj Sethuraman, Richard Briesch, William Dillon

FB04 – Monch

Online Markets

Chair: Avi Goldfarb

How Do Consumers Search for Products on the Internet
Chris Nosko

Advertising Spillovers: Field Experimental Evidence and Implications for Returns from Advertising
Navdeep Sahni

Pricing Online Content: Fee or Free
Anja Lambrecht, Kanishka Misra

Is Crowdfunding a Marketing Tool or a Finance Tool
Avi Goldfarb, Ajay Agrawal, Christian Catalini

FB05 – Montblanc

Advances in Retailing I

Chair: Rajiv Lal

Why Superstores?
Hyoung-Goo Kang, Hailey Hayeon Joo

Internet Dependency and Intention to Shop on Bricks and Mortar: The Mediating Role of Attitudes
Hela Ayed, Leila Cham, Ben Ghacham, Mohamed Nabil Mzoughi

~~Category Killers at the Brink~~
~~*Rajiv Lal, Jose Alvarez*~~

Dynamic Time Warping for Retail Trends
Ozden Gur Ali, Efe Pinar

Price Formats and the Success of Store Brands: The Mediating Effect of Trust and Fairness
Sudipt Roy, Sridhar Samu, Sheikha Alia

FB06 – Monterosa 1

Attention, Memory, Learning

Chair: Andres Musalem

~~The Influence of Memory Processes on the Selection of a Result on a Search Engine Result Page~~
~~*Tamara Ansons, Norbert Schwarz*~~

On the Cognitive Search for Consumer Preferences: Integrating Eye-Tracking and Electroencephalogram
Chelsea Wise, Rami Khushaba, Sarath Kodagoda, Jordan Louviere

Is it Now or Never? Limits to Inductive Learning in Consumer Dynamic Judgment Tasks
Robert Meyer, Jeff (Cexun) Cai, J. Wesley Hutchinson

Experiential Quality Learning in Consumer Brand Choice
Suman Ann Thomas, Jiang Zhiying, Surendra Rajiv

The Importance of Feature and Object Fixations in Choice-based Conjoint Analysis
Andres Musalem, Martin Meissner, Joel Huber

FB07 – Monterosa 2

Health Marketing II

Chair: Hongju Liu

How Business Cycles Affect the Healthcare Sector: A Cross-country Investigation
Jan Meyer, Kathleen Cleeren, Lien Lamey, Ko de Ruyter

Is Universal Healthcare Universally Good?
Sriram Venkataraman, V. Kumar, J. Andrew Petersen

Online Health Management: A Study of Patient-physician Communication via Social Media
Phylis Mansfield, Mary Beth Pinto

Skepticism and Credulity in the Market for Healthcare Services
Eric Schmidbauer, Dmitry Lubensky

The Path to Drug Choice: Paved with Promotion or Persistence?
Niels Holtrop, Jaap Wieringa, Maarten J Gijsenberg, Philip Stern

FB08 – Edelweiss

Price Competition I

Chair: Sofian Bahani

Cognitive Dissonance and Price Competition
Huihui Wang, Wilfred Amaldoss

Fattening Competition
Paul Dobson, Eitan Gerstner, Jonathan Seaton, Ratula Chakraborty

Product Recommendations and Price Competition
Sofian Bahani, Skander Essegaier

~~Self serving Behavior in Price-quality Competition~~
~~*Daniel Halbheer, Marco Bertini, Oded Koenigsberg*~~

2013 INFORMS Marketing Science Conference

Friday, July 12th, 2013 10.30-12.00 (FB)

FB09 – Mimosa

Media Channels

Chair: Tiffany Ting-Yu Wang

Are Small Media Under-Utilized?
Steffi Frison, Peter De Maeyer, Christophe Croux, Marnik G. Dekimpe

Optimizing Cross Channel Media Decisions: An Empirical ROI Comparison
Justin Kim, Ryan Stewart

Direct and Indirect Effects of Print Media Covert Advertising on Sales of Consumer Durables in China
Xia Wang, Lily Dong, Chunling Yu

Impact of Goal Orientation and Interpersonal Connectivity on Social Media Advertising
Tiffany Ting-Yu Wang

~~Online Search for Health and Medical Information: What Makes it More or Less Likely?~~
~~*Tuck Siong Chung*~~

FB10 – EMBA 1

Longterm Effects of Branding

Chair: Cem Bahadir

Consumer Choice and Brand Performance under the WIC Program: Short-term versus Long-Term Effects
Romana Khan, Sanjay Dhar, Ting Zhu

Role of Predisposition and Information on Consumer Choice and Equilibrium Market Price
Onesun Yoo, Rakesh Sarin

Short Life Cycle of an Experience Product's Long Life: A Bayesian Approach via Signaling Strategy
Goksel Yalcinkaya, Tevfik Aktekin

Acquiring Portfolios of Customers, Brands, and Technology: When Do They Pay-off?
Cem Bahadir, Sundar Bharadwaj

FB11 – EMBA 2

Choice Model Designs

Chair: Fred Feinberg

A Monte Carlo Study of Design Procedures for the Nonparametric Mixed Logit Model
Andreas Falke, Harald Hruschka

Estimating Individual-Level Choice Model Parameters: A Comparison of Econometric Approaches
Andrei Strijnev, Seethu Seetharaman

Habitual Choice and Model of Dynamic Screening
Hyeyoung Yoo, Jaehwan Kim

Evaluating Efficiencies of Conjoint Choice Experiment Designs
Elina Tang, Stefanie Biederman, Min Yang

Correcting for Covert Selection Processes in Consumer Evaluations
Fred Feinberg, Yuanping Ying, Linda Court Salisbury

FB12 – Geneve

Information Asymmetry

Chair: Pinar Karaca-Mandic

Optimal Incentives in Cross Selling: An Economic Approach
Andre Decrouppe

Consumer Preferences for Ambiguity over Time
Ayse Onculer, Yuanyuan Liu

Signaling Effects of Critics
Daniel Kaimann, Joe Cox

The Role of Agents and Brokers in the Market for Health Insurance
Pinar Karaca-Mandic, Roger Feldman, Peter Graven

FB13 – Luzern

Finance and Marketing II: Market Assets

Chair: Alexander Edeling

How Do Stock-market Sentiments Affect Product Category Demand? Case of Organic and Virtue Products
Jaakko Aspara, Xueming Luo, Ashish Kumar

Customer Satisfaction and The Cost of Capital
Martin Artz, Marwan El Chamaa, Holger Daske

Disclosure of Customer Metrics, Analysts' Behavior and Financial Performance
Kapil Tuli, Bernd Skiera, Emanuel Bayer

Marketing's Impact on Firm Value – What Do We Know?
Alexander Edeling, Marc Fischer

Understanding Price-to-earnings Ratios of High-growth Firms with Customer Metrics
Emanuel Bayer, Bernd Skiera

FB14 – Zurich

Organizing for Innovation

Chair: Hyun Jung Lee

The Impact of Corporate Ownership on Innovation
Sourindra Banerjee, Jaideep Prabhu, Gerald J. Tellis

Firm Decentralization, Market Research, and Product Proliferation
Vincent Mak, Nektarios Oraiopoulos, Jochen Schlapp

Optimal Introduction Sequence for a New Component Technology across the Product Line
Ivan Guitart, Guilherme Liberali, Stefan Stremersch

Building Value Creation Capabilities and its Impact on NPD Outcomes
Hyun Jung Lee, Jae H. Pae

2013 INFORMS Marketing Science Conference

Friday, July 12th, 2013 1.30-3.00 (FC)

FC01 – Montreux **Social Networks and Social Influence I** **Chair:** Zsolt Katona Identification of Influentials in Virtual Social Networks - An Agent-based Simulation *Henning Ahlf* Viral Marketing via Online Social Networks: Competing for Your Friends' Attention *Sarah Gelper, Ralf van der Lans, Gerrit van Bruggen* All Online Friends Are Not Created Equal: Discovering Influence Structure in Online Social Networks *Michael Zhang, Chong Wang, Xi Chen* Social Media Marketing: How Much Are Influentials Worth? *Zsolt Katona*	FC02 – Lausanne **Modeling Multichannel Performance** **Chair:** Marcel Goic A Model to Determine an Optimal Shipping Fee Policy *Christian Doppler, Bernd Skiera* The Dynamic Resource Allocation for Multi-channel Online Marketing *Michael Trusov, Hongshuang Alice Li, P. K. Kannan* Marketing Attribution in a Multichannel Customer Relationship Setting *Marcel Goic, Kirthi Kalyanam, Kinshuk Jerath* ~~The Long Road to Online Conversion: A Model of Multi-channel Attribution~~ ~~*Vibhanshu Abhishek, Peter Fader, Kartik Hosanagar*~~	FC03 – Bern **Strategic Consumer and Firm Decisions in Oligopolistic Markets: Session 3** **Chair:** Ahmed Khwaja Can Price Promotions Cement Store Loyalty? A Dynamic Structural Model of Spatial and Temporal Search *K. Sudhir, Ahmed Khwaja, Navid Mojir* ~~Dynamics of Option Value in Subscription Business Models: The Netflix Model under Operational and Technological Change~~ ~~*Vineet Kumar, Yacheng Sun*~~ Learning by Doing in the Solar Photovoltaic Industry *Bryan Bollinger, Kenneth Gillingham*	FC04 – Monch **Channels: Retail Competition** **Chair:** Dinah Vernik Positioning and Pricing of Horizontally Differentiated Products *Canan Ulu* Assessing the Value and Consequences of Direct Store Delivery Channel Arrangements *Mumin Kurtulu, Canan Savaskan-Ebert* Bundling Strategies for Vertically Differentiated Products *Dorothee Honhon, Amy Xiajun Pan* Managing a New Product Introduction through Quick Response and Advance Selling *Dinah Vernik, Fernando Bernstein, Preyas Desai*
FC05 – Montblanc **The Global Channel** **Moderator:** Tayfun Aykac Does Brand Loyalty Really Happens for Children Market? A Comparative Study from Indonesia, Portugal, and Brazil *Jony Haryanto, Arnaldo Coelho, Luiz Moutinho* Validating SME's Supply Chain in China - Institution Perspective *Ming-Chih Tsai, Yu-Chi Lu* Power Asymmetry in Intercultural Sales Negotiations *Tayfun Aykac, Robert Wilken, Frank Jacob, Nathalie Prime*	FC06 – Monterosa 1 **Consumer Characteristics** **Chair:** Mihaela Alina Nastasoiu Materialism and Beauty Perceptions Amongst Young Female Pakistani Consumers *Farah Naz, Jami Moiz* The Development and Validation of a Consumer Confidence Scale *Volkan Yeniaras, Antonis Simintiras, George Balabanis* Variety Seeking and Complex Consumption Behavior – An Analysis of Path Data *Alberto Marcati, Riccardo Massari, Pierpaolo D'urso* Predicting Churn through Variety Seeking Behavior *Mihaela Alina Nastasoiu, Mark Vandenbosch, Neil Bendle*	FC07 – Monterosa 2 **Service Marketing** **Chair:** Dubravko Radic Determinant Factors of Consumer Behavioral Intentions in Electronic Financial Service Encounters *Hideaki Kitanaka, Keiko Toya* Return on Service Amenities *Roland Rust, Rebecca Hamilton, Michel Wedel, Chekitan Dev* Service Productivity: Improving the Trade-off between External and Internal Efficiency *Dubravko Radic, Tilo Bellm*	FC08 – Edelweiss **Price Competition II** **Chair:** O. Cem Ozturk Coordination of Price Promotions Within a Product Line *Maxim Sinitsyn* Effect of Reference Prices on Product Positioning and Pricing in Non-durable Goods Markets *Sajeesh Sajeesh, Amit Mehra* Pricing Optimal Contingent Products in Marketing Channels *Sihem Taboubi, Georges Zaccour, Peter Kort* The Impact of Local Market Exits on Rival Pricing *O. Cem Ozturk, Sriram Venkataraman, Pradeep K. Chintagunta*

2013 INFORMS Marketing Science Conference

Friday, July 12th, 2013 1.30-3.00 (FC)

FC09 – Mimosa

Advertising Planning, Budgeting and Ad Effectiveness

Chair: Peren Ozturan

Decomposing Advertising Budgets
Ceren Kolsarici, Demetrios Vakratsas, Prasad Naik

Carryover Effects of Communication Activities: A Meta-Analysis
Soenke Albers, Christine Koehler, Vamsi Kanuri, Murali Mantrala

Timing of Advertising Pulses
Maarten J Gijsenberg, Vincent R Nijs

The Blind Leading the Blind? How Brands Follow Similar Brands in Advertising across Business Cycles
Peren Ozturan, Aysegul Ozsomer Tunali, Koen Pauwels

FC10 – EMBA 1

Sales Force Integration

Chair: Thomas Steenburgh

Aligning Marketing Campaigns and Sales Force
Somnath Banerjee, Pradeep Bhardwaj

IMC Strategies Involving Agency Relationships
Olivier Rubel

Cross Selling in the Banking Industry, the Value of Recommendations among Branches' Sales Managers
Guillermo Armelini, Sebastian Maldonado, Erica Salvaj

Pricing for Sales Leads
Jan Pelser, Dhruv Grewal, David Cox, Ko de Ruyter, Martin Wetzels

Implementing Corporate Entrepreneurship: The Marketing-sales Interface During a New Product Launch
Thomas Steenburgh, Florian Kraus, Michael Ahearne, Jeffrey Boichuk, Willy Bolander, Carmen Liutec

FC11 – EMBA 2

Bayesian Methods

Chair: Duncan Fong

Ingredients and Consumables: Inferring Consumption from Purchase
Ludovic Stourm, Eric Bradlow, Raghuram Iyengar

Modeling Music Preferences
Moon Young Kang, Jaehwan Kim

Bayesian Multidimensional Scaling Incorporating Dimension Reparameterization with Variable Selection
Duncan Fong

~~Analyzing Moment-to-moment Data Using a Bayesian Functional Linear Model: Application to TV Show~~
~~*Pil Sam Hui, Tom Meyvis, Henry Assael*~~

FC12 – Geneve

Online Customer Response

Chair: Alexander Bleier

Online Smile Cues: A Double-edged Sword of OCSR on Online Customer Consequences
Xueni Li, Silu Yu, Weini Li

Text Mining of Online Reviews: A Methodology for Analyzing Sentence-Based Customer Opinions
Sanjoy Ghose, Shaoqiong Zhao

Text Mining: Moving from Content Analysis to Predictive Modeling
Paul Wang, Con Menictas

The Importance of the Source in Personalized Online Banner Advertising
Alexander Bleier, Maik Eisenbeiss

~~When Does Online Content Matter? The Role of Source and Message Characteristics~~
~~*Mark Elsner, Maik Eisenbeiss, Werner Reinartz*~~

FC13 – Luzern

Finance and Marketing III: Innovation

Chair: Paul Valentin Ngobo

Attenuation of News Value: An Empirical Study with Best Companies Lists
Chayoun Kim

Going Public: How Stock Market Participation Changes Firm Innovation Behavior
Simone Wies, Christine Moorman

Explaining Cross-country Differences in the Effects of R&D Expenditures on Risk and Stock Returns
Paul Valentin Ngobo, Hubert Gatignon

FC14 – Zurich

Innovation in Emerging Markets

Chair: Mohammed Alnuwairan

Help or Hindrance? How Global Innovation Clusters Hurt and Stimulate Each Other
Nukhet Harmancioglu, Koen Pauwels, Gerald J. Tellis

Technological Leapfrogging in Emerging Markets
Gerald J. Tellis, Deepa Chandrasekaran

The Hesitant Hai Gui Return-migration Preferences of U.S.-Educated Chinese Scientists and Engineers
Robert Zeithammer

Reverse Logistics: The General Environment Analysis of Emerging Economy Country
Mohammed Alnuwairan, Munirah Almousa, Stephen Eldridge

2013 INFORMS Marketing Science Conference

Friday, July 12th, 2013 3.30-5.00 (FD)

FD01 – Montreux

Social Networks and Social Influence II

Chair: Srinath Gopalakrishna

~~Co-Evolution of Purchase Behaviors and Networks~~
~~*Sang-Uk Jung*~~

Detecting Influential Consumers in the Twitter Network on Competing Products
Makoto Mizuno, Makoto Abe, Naoki Shinbo

~~Health Marketing with a Focus on Social Networks~~
~~*Di Fang*~~

Linking Social Network Structures to Sales Prospecting Outcomes
Srinath Gopalakrishna, Andrew Crecelius

FD02 – Lausanne

Multichannel Marketing

Chair: Els Breugelmans

Are Offline and Online Channels Either Substitutes or Complements? The Evidence from Beauty Products
Jee Yeon Kim, Jeonghye Choi

How Bad is Online Shopping Cart Abandonment? An Investigation across Multiple Shopping Sessions
Stanislav Stakhovych, Jie Zhang, Michel Wedel, Yuanping Ying

The Effects of Varying Channel Experiences and Direct Marketing on Customer Retention
Chun-Wei Chang

Cross-Channel Promotion Effects in Multi-Channel Grocery Retailing
Els Breugelmans, Katia Campo, Huying He

FD03 – Bern

Emerging Markets and Beyond

Chair: Kaifu Zhang

Shadow Banking and Relational Contracts in Emerging Markets
Jian Ni, Qiaowei Shen

A Dynamic Game of Entry and Expansion in the Chinese Fast-Food Market: KFC vs. McDonald's
Qiaowei Shen, Aamir Rafique Hashmi, Ping Xiao

Brands and Stereotypes
Kaifu Zhang

FD04 – Monch

ISMS Doctoral Dissertation Proposal Award Winners

Chair: K. Sudhir

Improving Survey Construct Accuracy through Uncertainty Inferred from Voice-based Responses
Hye-jin Kim, Huanhuan Shi, Min Ding

The Attribute-Based Multi-Armed Bandit for Adaptive Marketing Experiments
Eric M. Schwartz, Eric Bradlow, Peter Fader

Competition in Corruptible Markets
Shubhranshu Singh, Ganesh Iyer

FD05 – Montblanc

Channel Management

Chair: Ying Xie

Managing Role Stress in Buyer-Supplier Relationships: Governance Mechanisms and Market Uncertainty
Maggie Chuoyan Dong, Yulin Fang, Vivian Xu Zheng

The Valuation of B2B Relationship: Focus on the Impact of Relationship on Value Trade-offs
Kyungok Yoo, Jaewook Kim

The Impact of Sales Visits on Mere-Measurement Effects: Evidence from a B-2-B Setting
Ying Xie, Ramkumar Janakiraman, Xiaojing Dong

~~Aligning Marketing and Sales for More Effective Channel Management~~
~~*Sujatha Chandrasekhar, S. Sriram*~~

FD06 – Monterosa 1

Consumer Decision Making

Chair: Xianchi Dai

Disaggregating Preference Stability into Core and Supplementary Product Attribute
Fangzhou Xu, Theodore Noseworthy, Towhidul Islam

~~Tipping Point in Consumer Choice: The Case of Collections~~
~~*Leilei Gao, Yanliu Huang, Itamar Simonson*~~

Influence of Temperature on Consumer Decision
Jungmin Jang, Song Oh Yoon

When Does Playing Hard-to-Get Increase Romantic Attraction?
Xianchi Dai, Ping Dong, Jayson Jia

FD07 – Monterosa 2

Customer Equity Through CRM

Chair: Evsen Korkmaz

A New Look at Customer Relationship Management: Reducing Risks by CRM Strategy
Tae Ho Song, Shijin Yoo, Sang Yong Kim

Customer Equity: What is the Impact of the Model Adopted in the Results?
Henrique Martins, Fernando Luce, Cleo Silveira

The Synergy Effect of Loyalty Program Integration on Customer Equity
Dae Yun Park

Market Segmentation in Buy-Till-You-Defect Models
Evsen Korkmaz, Dennis Fok, Roelof Kuik

FD08 – Edelweiss

Advances in Pricing

Chair: Vinay Kanetkar

Decomposing Pass-Through in Regular Retail Price
Chaoqun Chen, Duncan Simester, Blake McShane, Eric Anderson

A Cloud Computing Pricing Model
Nazim Taskin, Tayfun Keskin

A Multi-Period Model of Scheduling the Product Line Sales Promotion
Zelin Zhang, Yihao Zhang, Murali Mantrala, Xiaodan Dong

Are All Price Elasticity Estimates Biased? Role of Purchase Quantity in Price Elastisties
Vinay Kanetkar

2013 INFORMS Marketing Science Conference

Friday, July 12th, 2013 3.30-5.00 (FD)

FD09 – Mimosa

Store Brand Power

Chair: Mark Vroegrijk

The Power of Store Brands: An Integrated Framework on the Drivers of Store Loyalty
Rita Coelho do Vale, Pedro Verga Matos

Risk Aversion and Preference for Store Price Format
Koichi Yonezawa, Timothy Richards

Effect of Walmart on National Brands and Private Labels
Pranav Jindal, Ting Zhu, Pradeep K. Chintagunta, Sanjay Dhar

Vertical Positioning of Store Brands
Eunkyu Lee, Hwan Chung

Can Economy Private Labels Help Defend Against the Hard-discounter Threat?
Mark Vroegrijk, Els Gijsbrechts, Katia Campo

FD10 – EMBA 1

Sales Force Performance Assessment

Chair: Ahmed Timoumi

Metrics for Assessing Salespeople's Performance: An Empirical Approach
Wei Zhang, Ajay Kalra

Does Salesperson Prioritization Pay Off?
Margot Loewenberg, Markus Meierer, René Algesheimer

Career History as a Determinant of Pay Level and Pay Structure of Sales Managers
Alireza Keshavarz

Optimal Delegation of Retail Sales Force Management and Compensation to the Manufacturer
Ahmed Timoumi, Anne Coughlan, Skander Essegaier

FD11 – EMBA 2

Conjoint Analysis

Chair: Alexandru Degeratu

Identifying Relevant Attributes in Conjoint Analysis using Data Mining Techniques
Sebastian Maldonado, Ricardo Montoya, Richard Weber

Optimal Experimental Designs for Nonlinear Conjoint Analysis: Solving the Conundrum
Agata Leszkiewicz, Mercedes Esteban-Bravo, José Vidal-Sanz

Accounting for Heterogeneity, Utility Covariances, or Both in Conjoint Choice Models?
Friederike Paetz, Winfried Steiner

The Impact of Corporate Social Responsibility Violations on Marketing
Michael Riechert, Raoul Kübler, Soenke Albers

Learnings from 10 Years of Running Conjoints for Strategic Decision Making
Alexandru Degeratu, Ankita Gupta

FD12 – Geneve

Auctions

Chair: Martin Spann

Estimation of Beauty Contest Auctions
Hema Yoganarasimhan

The Impact of Individual-level Consumer Surplus on Subsequent Willingness-to-Pay and Consumer Behavior – An Example from Online Auctions
Eric Greenleaf, Inhye Kang

Measuring the Impact of Price Matching Guarantees on Price Dispersion and Willingness to Pay in Auction
Peter Popkowski Leszczyc, Ernan Haruvy

Competitive Lead Purchase by One-of-a-Kind Service Providers
Atanu Sinha, Yacheng Sun

Pay What You Want as a Marketing Strategy in Monopolistic and Competitive Markets
Martin Spann, Robert Zeithammer, Klaus Schmidt

FD13 – Luzern

Finance and Marketing IV: Time and Space

Chair: Peng Zou

How Business Cycles Change the Relationship between New Product Introductions and Stock Performance
Thomas Eichentopf, Berk Ataman, Gerrit van Bruggen

Investors' Risk Reactions in Times of Crises: A Natural Experiment in Selected EU Countries
Nikos Kalogeras, Joost M.E. Pennings

The Influence Mechanism of Overseas Investment Bank Rating On Stock Fluctuation of Chinese Internet
Zhanpeng Yang

Corporate Social Responsibility and Market Value in Emerging Markets
Peng Zou, Qi Wan, Jinhong Xie

FD14 – Zurich

New Product Design

Chair: K N Rajendran

Affective Computing and New Product Development
Devanathan Sudharshan, Rodoula Tsiotso, Ben Liu, Olivier Furrer

How Long to Squeeze that Creative Juice? An Empirical Study of the Impact of Movie Production Timing
Fangyun (Tom) Tan, Josh Eliashberg, Kartik Hosanagar

Mitigating Agency In Teams: An Empirical Analysis of Film Production in the US
Vishal Narayan, Vrinda Kadiyali

What Does It Look Like? An Objective Measurement of Design Similarity
Thomas Schreiner, Thomas Fandrich, Mark Heitmann

Identifying Attributes that Really Matter using the Kano Method
K N Rajendran, Shashidhar Kaparthi

2013 INFORMS Marketing Science Conference

Saturday, July 13th, 2013 8.30-10.00 (SA)

SA01 – Montreux **Social Media and the Brand** **Chair:** Mark Vandenbosch The Impact of Social Media on Brand Loyalty *Yaniv Dover, Scott Neslin* Social Media - Effects along the Brand Value Chain *Markus Kick* Branded Social Games: Impact of Player's Behaviors on Brand Equity *Damien Renard, Christine Balagué* The Effect of Engagement in Social Media on Purchase Behaviors *Mark Vandenbosch, Bobby Calder, Edward Malthouse*	**SA02 – Lausanne** **Adoption of Online Channels** **Chair:** Qiang Lu Are Early Adopters of Online Channels More Profitable? Targeting Right Customers at the Right Time *Jing Li, Umut Konus, Fred Langerak, Koen Pauwels* Balancing Channel Exposure and Channel Profits: Retail Platform Adoption and Management *Qin Zhang, Tat Chan, Fan Zhang* Adding Clicks: Understanding the Impact of Adding an Internet Channel on Direct and Indirect Channel *Qiang Lu, Y. Yang, Y. Ulku*	**SA03 – Bern** **Emerging Markets in China** **Chair:** Yang Li **Co- Chair:** Kaifu Zhang Market Recovery Strategy after a Major Natural Disaster: An Empirical Study of 2008 Sichuan Earthquake *Qi Wang, Yani Dong, Jinhong Xie, Wei Li* ~~An Empirical Investigation of the Rise and Fall of the Chinese Group Buying Industry~~ ~~*Chunhua Wu, Xinlei (Jack) Chen, Ting Zhu*~~ The Heterogeneous Impact of Studio Advertising versus Online Word of Mouth: Evidence from Chinese Movie Industry *Yang Li* Social Identity and Consumption – The Effect of the HuKou System on Household Consumption in China Mandy Hu, Binkai Chen, Ming Lu, Ninghua Zhong	**SA04 – Monch** **Game Theory: Pricing and Communication** **Chair:** Neil Bendle Sponsored Search vs. Search Engine Optimization: Competitive Strategies for Internet Retailers *Amit Mehra, Jagmohan Raju, Ram Bala* The Effect of Location on Pricing Strategies *Marielle Non* Why the Meek Won't Inherit Madison Avenue (or Wall Street or Even Main Street) *Neil Bendle, Mark Vandenbosch* When the Buyer is Not the User *Axel Stock* ~~Coalitions, Auctions and Bargaining in the Market for E-Books~~ ~~*Rajeev Kohli*~~
SA05 – Montblanc **Channel Strategy** **Chair:** Chi-Cheng Wu ~~Strategic Decentralization with Inventory Commitments~~ ~~*Sudheer Gupta, Harish Krishnan*~~ Channel Strategy When Consumers Comparison Shop *Sridhar Moorthy, Yongmin Chen* Channel Structure and Money-Back Guarantee Policy *Kezhou Wang, Yunchuan Liu* Manufacturer's Response to the Retailer's Extended Warranty *Chi-Cheng Wu, Lu Hsiao, Ying-Ju Chen*	**SA06 – Monterosa 1** **Social Influence and Culture** **Chair:** Umut Kubat ~~Exploratory Study on Changing Consumer Cultural Trends in a Developing Economy~~ ~~*Huma Amir*~~ The Role of Social Comparison Direction and Comparison Target in Service Delays *Ying Ho, Nga Cheng Chan* Fake it Till You Make it: Effect of Promoting Domestic Brand as Foreign on Consumer Behaviour *Harsh Dadhich* Acculturation, Brand Cultural Symbolism and the Role of Advertising Language on Brand Evaluations *Umut Kubat, Vanitha Swaminathan*	**SA07 – Monterosa 2** **Bundling** **Chair:** Sreya Kolay A Conjoint Model for Self-designed Service Bundles *Raghuram Iyengar, Kamel Jedidi, Vithala R. Rao* Bundling of Competing Manufacturers' Products *Vithala R. Rao, Nanda Kumar* ~~Optimal Selling Strategies for Sequentially Offered Events~~ ~~*Sreya Kolay, Rajeev Tyagi*~~ Bundling, Inter-temporal Pricing or Both? A Normative Assessment *Ashutosh Prasad, R. Venkatesh, Vijay Mahajan*	**SA08 –Edelweiss** **Cause Related Marketing** **Chair:** Reetika Gupta Fighting for a Cause or Against It: A Longitudinal Perspective on Revenue and Survival *Keith Botner, Arul Mishra, Himanshu Mishra* Fear vs. Hope: Organ Donation Decision *Surat Teerakapibal, Pavitra Jindahra* Crossing the Recycling Bin Boundary: The Effect of Product Distortion on Product Disposal Decision *Remi Trudel, Jennifer Argo* The Heritability of Preferences for Eco-Friendly Products *Arvind Rangaswamy, Huanhuan Shi, Min Ding* When a Green Product Backfires: Examining How Consumers View Negative Side Effects of CSR Initiatives *Reetika Gupta, Nevena Koukova*

2013 INFORMS Marketing Science Conference

Saturday, July 13th, 2013 8.30-10.00 (SA)

SA09 – Mimosa

Assortment

Chair: Arjen van Lin

The Effects of Assortment Organization on Consumers' Decision Making: A Fluency Account
Yi Li, Selin Atalay

A Tempting Assortment: The Effects of Assortment on Multicategory Purchase Incidence
Sungtak Hong, Kanishka Misra, Naufel Vilcassim

Retail Market Basket Analysis using Multi-criteria Decision Techniques: A Case Study
Douglas MacLachlan, Reza Sheikh, Afshin Mirzaei

Hello Jumbo! The Spatio-temporal Roll-out and Consumer Adoption of a New Banner
Arjen van Lin, Els Gijsbrechts

SA10 – Asuka

Sales Force Motivation

Chair: Tanjim Hossain

Sales Contests: How "Sour Grape" Prize Structures Enhance Salesperson Effort and Performance
Jeffrey Boichuk, Niladri Syam, Michael Ahearne, James Hess

When the Wheat Lies among the Chaff-Salesperson's Luxury Brand Effort in a Multi-Branded Environment
Moumita Das

The Role of Fairness in Sales Organizations
Vincent Onyemah, Dawn Iacobucci, Barton Weitz, Dominique Rouzies

President's Club or Wall of Fame and Shame? Extrinsic and Intrinsic Motivations in Contest Design
Tanjim Hossain, Mengze Shi, Robert Waiser

SA11 – EMBA 2

Dynamic Econometric Models

Chair: Charles Kan

Applying SUR (Seemingly Unrelated Regressions) and Dimension Reduction Methods in Market Mix Models
Ekaterina Trutneva, Ekaterina Atanasyan

Data Fusion over Multiple Time Periods to Develop Pseudo Longitudinal Data
Catherine Frethey-Bentham

Understanding Common Trends in Sustainability Strategy: A Binary Data Dynamic Factor Analysis Model
Charles Kan, Rajdeep Grewal

~~The Impact of Recalls on Customer Acquisition and Customer Retention in the Automobile Industry~~
~~*Florian Stahl, Lucas Beck, Mark Heitmann*~~

SA12 – Geneve

Empirical Generalizations

Chair: Blake McShane

A Model of Mature Market Growth and Decline
Steven Shugan, Debanjan (Deb) Mitra

Exploring the Empirical Bias in Digital Marketing Research
Morana Fuduric, Ana Javornik, Andreina Mandelli

Meta-MANOVA with Application to Choice Overload
Blake McShane, Ulf Bockenholt

SA13 – Luzern

Finance and Marketing V: Communication

Chair: Don O'Sullivan

Media Mix Decisions and Firm Value
Pablo J. Lopez-Tenorio, Jaime Romero

The Roles of Advertising and Marketing Capability in Influencing the Financial Impact of News
Guiyang Xiong, Sundar Bharadwaj

~~Selling Losers and Keeping Winners: How Goal Dynamics Predict a Reversal of the Disposition Effect~~
~~*Arvid Hoffmann, Jaakko Aspara*~~

CEO Stock Options CMO Power and Marketing Expenditure
Don O'Sullivan, Geoff Martin

SA14 – Zurich

Consideration Sets and Segmentation

Chair: Michel van de Velden

Age-Related Models of Loyalty in Radio Listening: Station Recency and Listening Duration
Gilles Laurent, Raphaëlle Lambert-Pandraud

Forecasting Substitution Patterns when Consumers Diversify Their Consideration Sets
Michael Palazzolo, Fred Feinberg

Explaining Environmental Consciousness at the Individual and Cross-national Level: A Meta-analysis
Meike Morren

Online Profiling and Clustering of Facebook Users
Michel van de Velden, Jan-Willem van Dam

2013 INFORMS Marketing Science Conference

Saturday, July 13th, 2013 10.30-12.00 (SB)

SB01 – Montreux

Impact of Social Media Investments

Chair: Kalyan Raman

Effects of Social Media Interactions on Consumer Mind-set Metrics and Sales
Lisette de Vries, Sonja Gensler, Peter S.H. Leeflang

Social Media and Advertising Interaction Effects
Lai Jiang, Bryan Bollinger, Michael Cohen

The Effect of Social Media Marketing Communication on Customer Behavior: An Empirical Investigation
Ramkumar Janakiraman, Ram Bezawada, Ashish Kumar

Dynamic Interaction of Social Media and Marketing Communications
Kalyan Raman, Vijay Viswanathan

SB02 – Lausanne

Modeling Online Behaviors to Improve Performance

Chair: Rakesh Niraj

Mathematical Theory for Hit Phenomena as Marketing Science
Akira Ishii, Hidehiko Koguchi, Koki Uchiyama

Incorporating Consumer Browse Data: Extended Item-Based Top-K Recommendation Algorithms
Xiaomeng Du, Meng Su, Xiaoyu Zhou

Does Auction Design Affect Participation and Performance? Evidence from Crowd-Sourcing Platforms
Chong Wang, Yili (Kevin) Hong

Choosing the Right Tools for the Job to Boost Online and Offline Sales
Rakesh Niraj, Tanya Mark, Jan Bulla, Ingo Bulla

SB03 – Bern

Emerging Markets in India

Chair: K. Sudhir

~~Analyzing the Performance of Brands in Fragmented Retail Markets of Emerging Economies~~
~~*V. Kumar, Denish Shah, Yi Zhao*~~

Transaction Costs and Technology Adoption in Emerging Markets
Ishani Tewari, K. Sudhir

Paying for Intermediate Output: A Field Intervention
Xiaolin Li, Om Narasimhan, Ranjan Banerjee, George John

The Impact of Offshoring New Product Development (NPD) to Emerging Markets on Shareholder Value
Venkatesh Shankar, Nicole Hanson

SB04 – Monch

Game Theory: Product Quality and Innovation

Chair: Subramanian Balachande

Competitive Preannouncement in a Context of Bilateral Information Asymmetry
Sumitro Banerjee, David Soberman

Effects of Competitor's Referral on Product Quality and Consumer Welfare
Hongyan Shi, Baojun Jiang

Game Theoretic Cost Allocation Model to Enhance Co-Operation
Pong Yuen Lam, Yuho Chung

Premium Offers with Product Purchase as a Signaling Device
Subramanian Balachander

Signaling in a Horizontally Differentiated Market through Word-of-Mouth
Sreelata Jonnalagedda

SB05 – Montblanc

Movies

Chair: Rahat Ullah

Estimating Consumer's Movie Choice with Non-compensatory Decision Analysis
Youngju Kim, Jaehwan Kim

Optimizing Movie Release Timing across Channels and International Markets
Sumaiya Ahmed, Ashish Sinha

Like the Book, Hate the Movie? Understanding the Drivers of Adapted Movie Evaluations
Amit Joshi, Huifang Mao, Zachary Johnson

SB06 – Monterosa 1

Applied Theory in Marketing

Chair: Juanjuan Zhang

Word of Mouth Bias and Optimal Communication Strategies
Yogesh V. Joshi, Andres Musalem

A Model of Brand Portfolio Strategy
Matthew Selove, Jeanine Miklós-Thal, Michael Raith

Information Disclosure and Ratcheting in Dynamic Setting
Jiwoong Shin, Brian Mittendorf, Dae-Hee Yoon

SB07 – Monterosa 2

Behavioral Pricing

Chair: Monika Käuferle

Partitioned Pricing of Hedonic Versus Risk Mitigating Product Features Given Prior Risk Peceptions
Dipankar Chakravarti, Joydeep Srivastava, Rajesh Bagchi

Payment Sequence Preferences: Paying too Much Today and Being Happy About it Tomorrow
Bernd Skiera, Fabian Schulz, Christian Schlereth

Limited Memory Consumers and Price Dispersion
Levent Kutlu

Reference Price on Brand Choice Across Online/Offline Grocery Channels. Internal vs. External
Javier Cebollada, Marta Arce

The Effect of Reference Products on the Price Image of Retailers
Monika Käuferle, Katia Allexi, Werner Reinartz

SB08 – Edelweiss

Corporate Social Responsibility

Chair: May Wang

When Doing Good Leads to Increased Customer Loyalty: Which Firms Benefit from CSR?
Jenny van Doorn, Marnix Bügel, Peter Verhoef, Marjolijn Onrust

The Effect of Social Pressure on Corporate Social Responsibility
Paola Mallucci, George John, Tony Cui

Go Regular! Who Gains from Large-size Soda Bans?
Ratula Chakraborty, Paul Dobson, Eitan Gerstner, Jonathan Seaton

How Does the Explanation after a Crisis Affect Consumers Trust and Distrust towards the Company?
May Wang, Xiaoyun Chen

2013 INFORMS Marketing Science Conference

Saturday, July 13th, 2013 10.30-12.00 (SB)

SB09 – Mimosa **Return and Complain Behavior** **Chair:** Ricardo Montoya The Analytics of Product Return Episodes: Impact of Restrictions on Return Privileges *Michele Samorani, Paul Messinger, Aydin Alptekinoglu* Empirical Analysis of the Effect of Out-of-Stocks of Fast-moving Products on Customer Behavior *Ricardo Montoya, Marcelo Olivares* Integrating Relationship Marketing Activities into Organizational Complaint Handling *F. Javier Sese, Jesus Cambra, Iguacel Melero*	**SB10 – Asuka** **Mobile Marketing** **Chair:** Scott Neslin Consumers Un-Tethered: A Three-Market Empirical Study of Consumers' Mobile Marketing Acceptance *Fareena Sultan, Andrew Rohm, Margherita Pagani, Tao (Tony) Gao* Evolution of Mobile Services in UK Retailing - A Longitudinal Study of Developments and Expectations *Sonja Lätti* The Evolution from Mobile Users to Mobile Shoppers *Mingyung Kim, Yerim Chung, Jeonghye Choi* The Impact of Mobile App Usage on Consumer Purchase Behavior *Scott Neslin, Harald van Heerde, Isaac Dinner*	**SB11 – EMBA 2** **Structural Models** **Chair:** Nan Yang An Empirical Study of Pre-market Licensing for Drug Innovation *Manuel Hermosilla* Learning by Doing and Consumer Switching Cost *Yufeng Huang* Very Simple Markov-Perfect Industry Dynamics *Nan Yang, Jaap Abbring, Jeffrey Campbell, Jan Tilly* ~~A Structural Model of the Post Patent Ethical Drug Market~~ ~~*Yu Yu, Yi Zhao*~~	**SB12 – Geneve** **Competitive Response** **Chair:** Jimi Park Competitive Interactions in Promotional Strategy among Prescription Drugs *Abhik Roy, Mary Schramm* Exit, Market Research and Entry: When, Where, How? *Markus Christen, David Soberman* Hypercompetitive Rivalry in Contests *Jeff (Cexun) Cai, Robert Meyer, Jagmohan Raju* Investigating Competitive Reaction Volatility: The Measurements and Propositions *Jimi Park, Shijin Yoo*
SB13 – Luzern **Social Influence Online** **Chair:** Patrali Chakrabarty Does Peer Pressure Always Lead to Conformity? *Monic Sun, Feng Zhu, Michael Zhang* Modeling Civic Socialization and Purchasing Intentions in the Context of Social Media and Blogs *Despina Karayanni, Nickoletta Koutsogiannopoulou* Online Reviews and Consumers' Willingness to Pay: The Role of Uncertainty *Yinglu Wu, Jianan Wu* Social Marketing through Choice of Online Product Review Medium *Patrali Chakrabarty*	**SB14 – Zurich** **Social Networks** **Chair:** Puneet Manchanda The Effect of Personal Customer Communication and Sweepstakes in Social Networks *Joerg Burkhardt, Martina Steul-Fischer* Unraveling the Effects of Top Marketing and Sales Executives' Experience: Social Network Perspective *Aditya Gupta, Rui Wang* Work or Network? How Human Brand Managers (and Who They Know) Shape Job Market Outcomes *César Zamudio, Julie Guidry Moulard, Angeline Close* Performance in Multilevel Marketing: An Empirical Analysis *Puneet Manchanda, Eunsoo Kim*		

2013 INFORMS Marketing Science Conference

Saturday, July 13th, 2013 1.30-3.00 (SC)

SC01 – Montreux **Social Media Dynamics** **Chair:** Wenjing Duan Understanding the Dynamics of Social Product Usage *Tingting Fan, Eitan Muller, Peter Golder* Mapping Products on Social Tagging Networks: Insights for Demand Forecast and Positioning *Hyoryung Nam, William Rand, P.K. Kannan* The Impact of Online Word-of-Mouth on Television Show Viewership: A Curvilinear Temporal Dynamic *Romain Cadario* Social Media and New Drug Performance in the Pharmaceutical Industry *Wenjing Duan, Andrew Whinston, Qing Cao, Vicky Gu*	**SC02 – Lausanne** **Search and Media Effectiveness** **Chair:** Savannah Wei Shi ~~AT&T and iPhone: Multi-channel Advertising ROI~~ ~~*Chen Lin, Sandy Jap*~~ Conditions for Owned, Paid and Earned Media Effectiveness: The Performance Impact of Online Customer *Ceren Demirci, Koen Pauwels, Shuba Srinivasan, Gokhan Yildirim* Product Placement and Web Search *Simcha Jong, Enrico Forti, Maria Vittoria Antonacci* Bid Pulsing Strategy and Keyword Performance *Savannah Wei Shi, Xiaojing Dong*	**SC03 – Bern** **Field Studies in Emerging Markets** **Chair:** Om Narasimhan **Co- Chair:** Rajesh Chandy Marketing vs. Finance: A Randomized Evaluation *Stephen Anderson-Macdonald, Rajesh Chandy, Bilal Zia* Do Sympathy Biases Induce Charitable Giving? The Persuasive Effects of Advertising Content *Subroto Roy, K. Sudhir, Mathew Cherian* Why do Some Micro-Entrepreneurs Do Better than Others? The Role of Pricing Latitude in Driving Performance *Magda Hassan, Jaideep Prabhu, Rajesh Chandy, Om Narasimhan* When and Where Were You Born? The Influence of Firms' Founding Conditions on International Growth *Elaine Y. N. Oon, Jaideep Prabhu, Kulwant Singh*	**SC04 – No Session**
SC05 – No Session	**SC06 – Monterosa 1** **Experiential Marketing** **Chair:** Joelle Lagier A Hedonic Consumption Based Analysis of Popularity of Hindi Film Music *Soumya Sarkar, Madhupa Bakshi* Conspicuous Sensory Consumption as a Means for Self-Worth Restoration *Tanuka Ghoshal, Rishtee Batra* Modeling Hedonic Adaptation in Shared Experiential Consumption *Natasha Foutz, Anocha Aribarg, Eunsoo Kim* Marketing of Art or Art of Marketing: How to Break Resistance? *Joelle Lagier, Virginie De Barnier*	**SC07 – Monterosa 2** **Modeling Heterogeneity** **Chair:** Pieter Schoonees Talk and Vice: How Relationships Affect Vice Behavior *Rachel Shacham, Peter Golder, Tulin Erdem* The Category Covering Problem for the Analysis of Generalized Sorting Task Data *Simon Blanchard, Daniel Aloise, Wayne S. DeSarbo* Detecting and Purging Response Styles with Constrained Dual Scaling *Pieter Schoonees, Patrick J.F. Groenen, Michel van de Velden*	**SC08 – Edelweiss** **Direct Marketing** **Chair:** Shameek Sinha Direct Mail Characteristics Effects on a Comprehensive Set of Advertising Effectiveness Measures *Daniela Naydenova, Janny Hoekstra, Tammo Bijmolt, Jaap Wieringa* Investigating the Effects of Mailing Variables and Endogeneity on Mailing Decisions *Nadine Schröder, Harald Hruschka* Optimal Coupon Targeting: Sequential Decision Making and the Value of Information *Shameek Sinha, Frenkel Ter Hofstede, Vijay Mahajan*

SC09 – Mimosa **Marketing Mix** **Chair:** Goutam Challagalla Investigating Consumer Behavior Towards Self-medication in the Light of Uncertainty Avoidance in Pakistan *Faryal Salman, Usman Warraich* New Product Incrementality *Ronald Shokes, Nazrul I. Shaikh* Customer Opportunistic Behavior: Does it Hurt or Help Them? *Goutam Challagalla* Customer Opportunistic Behavior: Does it Hurt or Help Them? *Goutam Challagalla*	**SC10 – No Session**	**SC11 – No Session**	**SC12 – Geneve** **Category Effects in Choice Models** **Chair:** Ralf van der Lans Investigating Cross-Category Incidence and Quantity Decisions for Products Having Common Attributes *Karthik Sridhar, Ram Bezawada* Variety, Quantity and Choice: The Additive Multivariate Ordinal Probit Model *Ralf van der Lans*
SC13 – Luzern **High-Tech and Service Marketing** **Chair:** Indranil RoyChowdhury Design Optimal Software Free Trial Strategy in the Presence of Network Externality and Consumer Learning *Shuojia Guo, S.Chan Choi* ~~When Market Leaders Leave Their Tier: Asymmetric Pricing in Online Sales of High Technology Products~~ ~~*Sourav Ray, Paul Messinger, Charles Wood*~~ A Meta-Analysis on the Consequences of Service Fairness *Xia Wang, Hean Tat Keh* Adoption of Technology Facilitated Services *Indranil RoyChowdhury, Sanjay Patro*	**SC14 – Zurich** **Word-of-Mouth** **Chair:** Florian Dost Amplified Word-of-Mouth Effectiveness and Efficiency in the Marketing Mix *Ulrike Simon, Farid Tarrahi, Florian Dost* Moderating Role of Credibility,Impact of Motivation,Social Relational Properties on eWOM SocialMedia *Payal Kapoor* The Why in Viral: Enhancers and Inhibitors of Deliberate and Selective Word-of-mouth Transmission *Florian Dost, Jens Sievert, Frank Jacob* ~~Predictors of Social Mobilization Speed~~ ~~*Chander Velu, Jeff Alstott, Stuart Madnick*~~		

How to Navigate the Technical Sessions

There are four primary resources to help you understand and navigate the Technical Sessions:

- This Conference Session listing, which provides the most detailed information. The listing is presented chronologically by day/time, showing each session and the papers/abstracts/authors within each session.
- The Author and Session indices provide cross-reference assistance (pages 95-99).
- The "Master Track Schedule" is on the back cover. This is an overview of the tracks (general topic areas) and where/when they are scheduled.

Quickest Way to Find Your Own Session

Use the Author Index (page 95) — the session code for your presentation will be shown along with the room location. You can also refer to the full session listing for the room location of your session.

The Session Codes

TA01

Room number. Room locations are also indicated in the listing for each session.

Time Block. Matches the time blocks shown in the Program Schedule.

The day of the week

Time Blocks

Thursday

A — 8:30am - 10:00am
B — 10:30am - 12:00pm
C — 1:30pm - 3:00pm
D — 3:30pm - 5:00pm

Friday

A — 8:30am - 10:00am
B — 10:30am - 12:00pm
C — 1:30pm - 3:00pm
D — 3:30pm - 5:00pm

Saturday

A — 8:30am - 10:00am
B — 10:30pm - 12:00pm
C — 1:30pm - 3:00pm

Thursday, 8:30am - 10:00am

■ TA01

01- Montreux

Digital Marketing Analytics

Cluster: Internet and Interactive Marketing

Invited Session

Chair: Shawndra Hill, University of Pennsylvania, The Wharton School, Philadelphia, PA, United States of America, shawndra@wharton.upenn.edu

1 - Completing the Virtuous Cycle between Paying for Music and Social Engagement in an Online Community: Evidence from a Randomized Trial

Ravi Bapna, University of Minnesota, Minneapolis, MN, United States of America, rbapna@umn.edu, Jui Ramaprasad, Akhmed Umyarov

Motivated by the new subscription based community models that exist for digital goods, particularly music, this paper examines the relationship between paying for a subscription and user engagement. Specifically we ask, does subscribing to a site, through payment, affect user behavior in terms of social engagement and involvement in other activities on the site? While prior literature has examined how user behavior, community involvement and social influence drives payment, we look at the reverse: the impact that payment has on user behavior. If present this would complete a virtuous cycle between subscription and social engagement. However, observational data does not allow us to disentangle these interlocked effects in a truly causal manner. We are able to isolate the causal effect between subscription and user engagement through a randomized field experiment conducted on the online music site last.fm, where users can access some features of the site for free and additional features if they pay a monthly fee and subscribe to the site. Our current results show that subscriptions do induce a change in user behavior: those who were gifted subscriptions are more active and engaged in forums over the long-term and increased the number of 'shouts' in the short-term as compared to those who were not. These preliminary results lead us to believe the that there is a virtuous cycle between social engagement and payment: once an individual starts climbing a virtuous mountain, by paying for a subscription, that individuals starts belonging more to the community. This work has implications for the music industry specifically and digital goods industries as a whole.

2 - Contracting for Content: A Model of Digital Goods Supply Chain

Ramnath K. Chellappa, Emory University, Atlanta, GA, United States of America, ram@bus.emory.edu, Shivendu Shivendu

Supply chain management strategies for physical products are often inapplicable to digital content publisher and on-line retailers. In digital goods, not only are transportation costs absent, common contractual instruments such as inventory cost sharing and return/buy back policies are infeasible and protection of intellectual property issues attain importance due to increasing threat of piracy. While there is rich literatures on physical goods supply chain strategies in operations management, we propose a model of digital goods supply chain wherein a content publisher contracts with an online retailer to reach consumers. Building on digital goods pricing and piracy research, we draw upon literature in economics of intellectual property licensing to develop two supply chain contracts: download- based licensing (DL) and catalog-based licensing (CL). We model contractual arrangement between an upstream content publisher and a downstream online retailer as a Stackelberg game and analyze several counterintuitive findings. First, we find that an online retailer contracts for the same catalog length under both contractual regimes while the price is higher in a DL based supply chain. Second, even though the retailer charges higher price for the same catalog length in DL regime, he always prefers the CL regime while the content publisher always prefers the DL contract. Not surprisingly an integrated supply chain leads to market offerings of higher catalog length and overall higher supply chain profits. We show that it is possible to coordinate the supply chain by infrastructure cost-sharing arrangements wherein the content publisher announces rates that take into account the agreed proportion of cost-sharing.

3 - Estimating Cross Platform and Cross Device Synergies in Web and Mobile Advertising

Anindya Ghose, New York University, Stern School, New York, NY, United States of America, aghose@stern.nyu.edu, Sung Hyuk Park, Sangpil Han

As companies divert more and more funds from traditional media towards digital advertising, they are often interested in understanding what effects the two possible channels of advertising–web advertising and mobile advertising–have on each other. Any analysis that measures the effects of web and mobile advertising only separately remains incomplete. In this paper, we model and estimate the interrelationship between web and mobile advertisements. We use a massive panel dataset based on individual-user-level responses to display ads on both web and mobile channels. To validate our empirical results, we design and execute a randomized field experiment, which corroborates our results from the econometric model. Our findings indicate that implementing web and mobile ads simultaneously improves web click-through rates, mobile click through rates and web conversion rates but worsens mobile conversion rates. This happens primarily because consumers are disproportionately more likely to click on a display ad from a mobile device but subsequently make a purchase through a PC.

4 - An Empirical Examination of the Antecedents and Consequences of Information Hiding in Crowd-Funded Markets

Gordon Burtch, Temple University, Philadelphia, PA, United States of America, tuc05426@temple.edu, Anindya Ghose, Sunil Wattal

Online anonymity affords individuals the opportunity to engage in behaviors they might not engage in if other people were observing them. Evidence of this fact has been documented repeatedly, in terms of everything from physiological responses to consumption patterns, generosity and community participation. The salience of this is on the rise, as a wide variety of transactions and interactions have shifted to online venues. As individuals' desire to control their information is continually growing, many websites provide tools for users to selectively or completely conceal their information from others. As examples of this, Amazon.com allows product reviewers to conceal their identities, while Facebook and Google+ allow users to dictate exactly which members of one's social network can see each piece of posted content as it is created. While it is clear that users desire information hiding mechanisms, the conditions under which they are used and the impacts of their use are less clear. Recent research has shown that users often employ these mechanisms sub-optimally and that their provision is not necessarily of economic benefit to stakeholders. Further, little is known about which users are most demanding of them or which behaviors are most often concealed. An understanding of these aspects is key, as the availability of user information is integral to a variety of business practices (e.g., personalization, targeted marketing, price discrimination). Bearing this in mind, we undertake a large-scale assessment of user information hiding behavior, leveraging proprietary data from one of the world's largest global crowd-funded markets. We employ a multi-method approach to identify a) the characteristics of individuals most likely to pursue information hiding and b) the characteristics of activities that are most likely to be concealed. We subsequently assess the downstream impacts of a focal user's information hiding on other users.

5- Social TV: using User Generated Content to Calculate Audience Affinity Networks for TV Shows and Brands

Shawndra Hill, University of Pennsylvania, The Wharton School, Philadelphia, PA, United States of America, shawndra@wharton.upenn.edu

Facebook and Twitter viewers of TV shows comment online about their daily lives and TV shows, and we base our novel, effective recommendation system (RS) on user-generated content (UGC) that TV viewers share on Twitter. We represent a TV show by all the tweets, in aggregate, of its Twitter followers and use these to reliably calculate and describe the similarity between TV shows. We use our large and unique data set to suggest and evaluate recommendations for TV shows (or other products). We discuss two main contributions: 1) a new methodology for collecting social media data that can validate social media-based RSs; and 2) a new privacy-friendly UGC-based RS reliant on TV viewers' publicly available Twitter text (more flexible than preselected keywords). Our approach predicts remarkably well which TV shows Twitter users follow. We show that: First, the UGC reflects demographics, geographics, and psychographics (viewer interests), and coin the term 'talkographics' to describe features a product's audience reveals in text message words; second, Twitter text represents complex combinations of those features; third, talkographic profiles allow us to calculate similarities between TV shows and make recommendations; and finally, our text-based approach performs differently for shows for which there is a demographic bias to the viewing audience compared to those that do not have a demographic bias. We show that our RS is generalizable by applying the same approach first to followers of clothing retailers and automotive brands, then to categories of TV show and clothing together to make cross-category recommendations.

■ TA02

02- Lausanne

Online Consumer Behavior

Cluster: Internet and Interactive Marketing

Invited Session

Chair: Hai Che, Associate Professor, Indiana University in Bloomington, Bloomington, IN, 47408, United States of America, haiche@indiana.edu

1 - The Impact of Emotions on Customer Behavior in Online Dating

Andrea Dechant, Ludwig-Maximilians-Universität (LMU), Munich School of Management, Geschwister-Scholl-Platz 1, München, 80539, Germany, dechant@bwl.lmu.de,
Anindya Ghose, Martin Spann

The internet plays an important role in match-making and online dating services became important players in the digital world. On dating platforms women and men contact potential mates by sending partner requests. The recipient of such a request may react positively, negatively or not at all. Requests and the reactions to them are evaluations of the entire person and therefore linked with substantial emotions. Previous research has already shown that emotions are relevant drivers of customer behavior. Since interpersonal relationships are characterized by a high level of emotions, the field of online dating is predisposed for analyzing which impact emotions have on customer behavior. Emotions result from success and failure in the communication with potential mates. The analysis of their effect on churn is in the focus of our study. We examine the impact of emotions on customer churn by analyzing user data of a large European online dating service. We observe communication behavior, sales and product data, contract history and demographics. This user data is linked with survey data about reasons of contract termination and emotions associated with communication on the platform. We find that emotions are an important churn driver. Refusals to requests sent as well as own refusals to requests received lead to negative emotions and increase churn. Furthermore, we are able to identify character traits as moderators of churn.

2 - Music Streaming or Download?: Consumer's Demand for Online Music Service

Hyowon Kim, Korea University Business School, Anam-Dong, Seongbuk-Gu, Seoul, Korea, Republic of, hyowonkim@korea.ac.kr, Jaehwan Kim

Recent technological improvements such as Internet or Smart Phone are having great impact on the music industry. Especially, the size of online music market is growing profoundly. There are two representative online music services: "music download" and "music streaming service." iTunes allows consumers to download music and Pandora Radio provides online music streaming service. Since the number of consumers who use one of these services has increased, marketers in online music industry are interested in how consumer's demand for online music is formed and how they think about two music services. In this study, two issues of online music service are investigated. First, we examine the relationship between music streaming and download service by observing interaction with two services and examine whether they are complementary goods or substitutes. Second, we explore the optimal price of online music bundles of streaming and download service, common market practice in the online sector. We approach to this problem via choice model and choice-based conjoint data. The model parameters are estimated via Bayesian MCMC method. Benefits and managerial insights are discussed for online music portal sites in Korea which provide diverse fixed-charge music services and bundles.

3 - Consumer Choice on Brand Website Visits: A Limited Consumer Search Approach

Jiyao Xun, Xi'an Jiaotong-Liverpool University, Business School, No.111 Ren'ai Road, Suzhou, China, jiyao.xun@xjtlu.edu.cn

In consumer choice behavior literature, a two-stage choice model serves as a base theory where choice behavior is decomposed into a consideration stage plus a choice stage. Yet, this default model has been increasingly challenged by the "limited consumer search" school of thought because consumers do not necessarily review all products in a choice set before decision making, but frequently draw on external information for mental shortcuts. Methodologically, the choice behavior in stage 1 has traditionally been latent because data that directly observes how consumers form their consideration set by eliminating alternatives is lacking. This study continues the "limited consumer search" line of reasoning and proposes an aided non-compensatory process in choice stage 1, where consumers reduce brand website alternatives by using online ratings to arrive at a consideration set. We use observed web analytics data to unveil the stage 1 choice process and also the transition from stage 1 to stage 2 which is extremely lacking in extant literature. Lastly, we cross-validate our model with two types of websites, i.e. search vs. experience/credence, and find our model is contingent on the type of website content, where consumers' inclination to use online rating for decisions on which brand website to visit vary.

4 - Consumer's Bidding Behavior under Online Group Buying Mechanism

Hai Che, Associate Professor, Indiana University in Bloomington, Bloomington, IN, 47408, United States of America, haiche@indiana.edu, Dan Zheng, Zhe Zhang

With the continuous rise and falls of group-buying websites in the past ten years, increasing studies have focused on the efficacy of this innovative business model. We analyze a panel data set which tracks the bidding dynamics of a special Online Group Buying (OGB) auction named 'Pingou' on Liba.com, and investigate consumer's aggregate bidding behavior under the OGB mechanism, such as the positive participative externality and price-drop effects (Kauffman and Wang (2001). We show that these two effects are not significant under the 'Pingou' context. We also find, (1) the number of existing orders has a significant negative effect on the number of new orders placed during the equal-length periods of a 'Pingou' auction; (2) there is a significant 'starting effect' in addition to the 'ending effect' - more orders are placed during the first period and last day of a 'Pingou' auction; (3) consumer's perceived velocity of the auction's progression also significantly influences their bidding behavior. Specifically, the lag average velocity of the past orders, which reflects the previous bidders' ability to drive down the price, has a negative effect on the number of new orders placed during the equal-length period of the 'Pingou' auction; while the average velocity of the past orders and the current orders, which reflects new bidders' contribution to the price-drop, has a positive effect.

■ TA03

03- Bern

Social Networks and User Behavior

Cluster: Internet and Interactive Marketing

Invited Session

Chair: Purush Papatla, Associate Professor, University of Wisconsin - Milwaukee, 3202 North Maryland Ave., Milwaukee, WI, 53211, United States of America, papatla@uwm.edu

1 - Long Live the Fan: The Impact of Network Structure on Survival in the Music Industry

Jung Youn Lee, KAIST, 291 Daehak-ro, Yuseong-gu, Daejeon, 305-701, Korea, Republic of, sjlee8867@kaist.ac.kr, Minki Kim, Geonhyeok Go

Today's consumers are inundated with the mass influx of new artists and songs. As a result, many musicians carry the burden of being labeled a one-hit wonder, even after achieving great album successes. A musician's ability to build and retain a loyal fan base has now become more critical to his survival in the market. From a firm's perspective, market penetration of record labels can also benefit from such loyal fans, who are more likely to make purchases (e.g. concert tickets) and promote music across peers via positive word-of-mouth. In this study, we investigate the determinants of a musician's survival, i.e., fan activity duration in online social network service, focusing on the role of user-specific network topology within fan community in sustaining fan activity. Econometrically, we apply an Accelerated Failure Time Model (AFTM) with log-logistic specification using individual-level Twitter data on fan activities in 2011. While previous studies on relationship marketing have mainly discussed enhancing relationships between firms and customers, this study shifts the focus to the value of cultivating relationships among customers who can obtain a higher level of utility by sharing a common object of fandom. The result shows that the degree to which fans tend to cluster together, or clustering coefficient, is significant and positively related to the length of fan activity, implying that the duration of a fan's loyalty is influenced by the availability of opportunities to interact and share his experiences with other fans. Based on the result, musicians and record labels could retain the loyal customers of their outputs by providing channels through which fans could develop relationships.

2 - Understanding the Structure and the Motivating Factors of Consumers' Social Media Participation

Ashish Kumar, Assistant Professor, Aalto University School of Business, P.O. Box 21230, Aalto/Helsinki, 00076, Finland, ashish.kumar@aalto.fi, Ram Bezawada

Marketing environment in the age of the Internet has been influenced by so many online technological developments. These new developments have not only empowered people by creating and disseminating the information like never before but also have affected the businesses are conducted. For example, developments in the field of search engine, email, mobile, and social media have given rise to new ways of conducting marketing activities such as affiliate marketing, display advertisement, email marketing, search marketing, and social media marketing among others. The widespread use of social media by large as well as small firms for business purposes have made this particular channel much topical subject of this digital era. The steady and deep percolation of social media in personal as well as professional life have affected both buyer and seller behaviors. The objective of this paper is to study consumers' participation in a firm hosted online social media site from two perspectives. First we come up with a conceptual framework of consumers' social media participation in a firm hosted social media site which constitutes two behaviors namely engagement and interaction. We also define the structure of these two online consumer behaviors. Second, we account for the effects of firm's social media efforts and marketing mix, consumers' social media activities and their characteristics on this participation. We adopt a recursive bivariate probit model to empirically estimate the consumers' participation in social media. We hope this study will help firms allocating their social media marketing budget efficiently by looking at the structure of consumers' social media participation and accounting for the effect of several observable factors that influence this participation.

3 - Do Privacy Controls Increase the Openness of Online Social Network Users?

Tuan Phan, Professor, National University of Singapore, Singapore, tuan.quang.phan@gmail.com, Huseyin Cavusoglu, Hasan Cavusoglu

We examine the causal relationship between privacy controls and public and private information disclosure behavior in the context of an online social network (OSN). Our identification is based on the exogenous policy change in the social networking platform in December 2009 that brought about more granular privacy controls. New privacy controls enabled users to choose the intended audience for each public post. We find that disclosure patterns of users changed to reflect the openness in sharing information as a result of improved privacy controls. Specifically, OSN users increased the use of public posts and decreased the use of private messages. We attribute this change to the sense of control hypothesis: OSN users fear of privacy loss and the reduction in this fear results in higher levels public disclosure. Consistent with our arguments, we find that the more OSN users worry about privacy dangers, and therefore less public and more private in disclosure patterns before the policy change, the greater the increase in their openness after the policy change.

4 - Succeeding in Extremely Competitive Markets: Insights from the Mobile App Market

Purush Papatla, Associate Professor, University of Wisconsin - Milwaukee, 3202 North Maryland Ave, Milwaukee, WI, 53211, United States of America, papatla@uwm.edu, Ruijiao Guo

The market for applications on mobile phones is extremely competitive. For instance, as of October 30th, 2012, approximately 700,000 apps were available for the Android platform. App developers therefore attempt to gain customers by giving their products away via free downloads or extremely low prices. The underlying assumptions are that, as the number of downloads increases, apps will gain more customers, and that apps which gain a large number of downloads can eventually generate revenue through paid versions with additional features. In this research, we investigate the conditions under which the first assumption holds. Specifically, we examine the effects of developer characteristics, price and promotional activities, and the presence of similar competing apps. Our investigation is based on a Bayesian ordinal analysis of data from 5,873 Apps for the Android platform. Our findings suggest that the app's price, number of reviews posted for the app, when the app was updated, the rating of the app, and the developer's previous experience, affect the number of downloads. Interestingly, we find that, as users download apps that are more expensive, they will be less sensitive to the prices of apps that they have not yet downloaded. We also find a fixed effect of the app category - apps related to card games, racing, sports, and wallpapers, are downloaded more than other categories. We also provide managerial implications and directions for future research.

■ TA04

04- Monch

Interfirm Contracting

Cluster: Special Sessions

Invited Session

Chair: Steven Seggie, Ozyegin University, Istanbul, Turkey, steven.seggie@ozyegin.edu.tr

1 - Stock Market Reactions to Technology Licensing Contracts

Erik Mooi, VU University Amsterdam, Amsterdam, Netherlands, emooi@feweb.vu.nl, Stefan Wuyts

The market for technology licensing amounted to US$173.4 billion in 2009. This market consists of licensees buying technology usage rights from licensors, often in the form of patents, copyrights, know-how, and blueprints. While licensing is an important market, little prior research has addressed licensing issues. We assert that licensing is a unique form of exchange that deviates in important ways from classical buyer-supplier exchange which has been examined in the past marketing literature. Drawing on contract theory and governance theory, we propose that the governance of technology license deals has important stock market implications for the licensee. We argue that the productive use of the acquired technology may either be supported or hindered by the nature and the specifications of the licensing contract. We identify differences among licensing contracts that may explain variation in the financial returns for licensees and formulate hypotheses. To test our framework, we create a unique and rich dataset composed of detailed descriptors of original licensing contracts (obtained through thorough text analysis), licensee stock market returns to the announcement of the licensing contract, and various firm descriptors. The findings help explain why some licensing deals help and other licensing deals hurt licensee performance.

2 - All for One, One for All: Governance and Bankruptcy in Franchisor-Franchisee Relationships

Kersi D. Antia, University of Wisconsin-Madison, Madison, WI, United States of America, kantia@bus.wisc.edu, Sudha Mani, Kenneth H. Wathne

Extant research demonstrates high interdependence in franchise relationships. Surprisingly, despite estimates of franchise system failure rate of 70%, the effect of such high interdependence on corporate bankruptcy has received limited attention. Integrating data from multiple archival sources, we undertake a census of all bankruptcy filings by a sample of more than 1100 franchisors and their franchisees over more than a decade to predict franchisee and franchisor bankruptcy. We not only document the interrelationship between the occurrence of franchisor and franchisee bankruptcies, but also examine how franchise system performance may be improved by deploying an appropriate mix of governance strategies. In doing so, we demonstrate that while some strategies may be beneficial for the franchisor they can be detrimental for the franchisee, and vice versa, and discuss what franchisors can do to overcome such conflicts. Our results pose direct and actionable implications for franchise relationships in particular and more generally for interfirm relationships characterized by high interdependence.

3 - Influence of Formal Contract Elements on Relational Behavior

Bjarte Ravndal, University of Stavanger Business School, Amsterdam, Norway, bjarte.ravndal@uis.no

It is generally agreed that formal contracts significantly impact behavior in business relationships. Still, a gap exist in our understanding of how different elements of formal contracts impact behavior. In this study, we investigate the effects of a set of commonly relied upon formal contract elements, framed as contract mechanisms, on co-operative behavior in IT sourcing relationships. We find that different contract mechanisms have very different effects on relational behavior. Most notably we find that reliance on detailed performance specifications and penalties drive competitive behavior. Moreover, complexity reinforces the negative effect of detailed performance specification on relational behavior. Conversely, co-operative behavior is promoted by the reliance on detailed requirement specifications. Finally, we find that while the direct effect of contract length is negatively related with cooperative behavior, this effect is significantly moderated by complexity.

4 - Why Asymmetric Relationships Don't Work: Empirical Evidence from Clustered Firms

Ragnhild Silkoset, BI Norwegian Business School, Oslo, Norway, ragnhild.silkoset@bi.no, Steven Seggie, Arne Nygaard

Conventional wisdom assumes that ongoing relationships high in trust often are symmetrical and efficient. The extant literature in interorganizational marketing has generally assumed a balanced, reciprocal and symmetrical relationship. For theoretical purposes this assumption may be reasonable but in empirical research in the real world, relationship contracts are most likely more asymmetrical than symmetrical. This study explores the impact of relational asymmetry upon performance. We argue that the prospect of a symmetrical relationship is rather unlikely in an inter-organizational context, and that like other social aspects of dyads i.e., power-dependence, conflict-cooperation etc., asymmetrical relationships affect inter-organizational performance. Our data based on 92 paired dyads show that when firm A invests in relational solidarity to firm B, firm B's relational solidarity in firm A will produce negative results. We present theoretical and practical implications of our work.

■ TA05

05- Montblanc

Marketing and Performance I

Contributed Session

Chair: Srinivas Reddy, Singapore Management University, 50 Stamford Road #05-01, Singapore, 178899, Singapore, sreddy@smu.edu.sg

1 - Does the Market Believe in Marketing? A Text Mining Based Informational Value Perspective

Joseph Johnson, Associate Professor, University of Miami, 501 Kosar Epstein Building, Coral Gables, FL, 33157, United States of America, jjohnson@miami.edu, Deb Mitra

There is a growing belief in the marketing community that marketing is losing its influence on firms' corporate strategy. We examine this issue from the investors' perspective by estimating the value of marketing information. We argue that if the role of the marketing function within the firm is insignificant, it should be reflected in a small valuation of a firm's marketing information compared to that for other information types. Moreover, if marketing is indeed losing its clout, this value must be getting smaller over time. We use text mining methods to extract the information pertinent to business functions in over 26,000 individual news articles between 1985 and 2010 that are related to 23 S&P 500 firms in the food, beverage and tobacco industries. We ascertain the value of marketing information by examining whether it is related to the firm's abnormal stock returns and if so, how it compares to the value of other types of business information. Our unique data enables us to address several questions, answers to which have so far been unknown. For example, how has the value of marketing information changed over a period of 25 years? For which firms is marketing information more valuable? Are there any objective determinants that explain the differences in the value of marketing information? Our preliminary results show that the value of marketing information is significantly positive but is lower than that of financial information. This value varies between firms and over time. Further tests reveal marketing information is more valuable when the variance of the equity market is high and when the firm has low marketing assets as reflected in low stock price to book value and low SGA expense to revenue ratios.

2 - New Product Innovation and Financial Market Performance: Does the Nature of Institutional Investors

Sundar Bharadwaj, Professor, University of Georgia, Terry School of Business, Atlanta, GA, United States of America, sundar@uga.edu, Atanas Nikolov, Guiyang Xiong

The financial market pays a significant premium for growth. Marketing managers are tasked with generating organic growth by launching new products. The limited empirical research on the financial market reaction in terms of both risk and returns to new products and innovation investment are mixed. The literature also finds that firms attempt to time the nature and launch of new products in order to influence the financial market. Institutional investors (II) own a significant portion of a firm stock. Such investors are heterogeneous in their investment horizon and thus value investments differently. Marketing managers tend to make these decisions without a consideration of the mix of institutional investors and their investment horizons. Academic marketing research also treats the investment community as homogenous and pays little attention to the varied investment time horizons of institutional investors. Using a panel data set of new product introductions by publicly traded firms, this study finds support for the moderating role of institutional investor type on the impact of new products on a firm's financial value and risk. The results are robust to endogeneity concerns, alternative explanations and observed and unobserved time invariant heterogeneity.

3 - The Financial and Market Impact of Product Failure: A Case of Prescription Drug Withdrawals

Srinivas Reddy, Singapore Management University, 50 Stamford Road #05-01, Singapore, 178899, Singapore, sreddy@smu.edu.sg, Shekhar Sattiraju, Jason Zhang, Pradeep K. Chintagunta

Since 1980, over 20 prescription drugs have been withdrawn from the market due to various safety concerns. Although the immediate financial impact is obvious in terms of lost revenue and market capitalization, the impact on other surviving brands of the withdrawing firm and on the competing brands in the same product class is not clear. In this research, we develop a framework for analyzing the financial and market impact of product withdrawal on withdrawing firm's brands and its competitors. We empirically investigate the effects using a dataset compiled for Baycol withdrawal, one of the largest drug withdrawals in recent history. Baycol, a popular cholesterol-lowering drug before its withdrawal in 2001, belongs to its parent company Bayer and a popular class of drugs known as 'statins.' Our dataset includes monthly data on brand-level sales and marketing expenditures between 1996 and 2003 for Bayer and its competitors. Preliminary analysis reveals 1) a significant negative spillover effect on the sales of other brands of the withdrawing firm, 2) a significant change in the withdrawing company's marketing effectiveness and dramatic reallocation of its marketing resources after the product withdrawal, and 3) a significant positive impact on the sales of the competing brands. Our research adds to the product failure literature by quantifying the spillover effects or loss of goodwill in an industry where product failures are hard to avoid in the long term and brands usually do not share explicit connections to each other and to their parent companies.

■ TA06

06- Monterosa 1

Consumer Aspects of Design

Contributed Session

Chair: Robert Kreuzbauer, Assistant Professor, Nanyang Business School, S3-B2C-104, Nanyang Avenue, Singapore, 639798, Singapore, robert.kreuzbauer@gmail.com

1 - How Stages of Self-Production Impact Consumers' Evaluation of and Relationship with Products

S. Sinem Atakan, Assistant Professor, Ozyegin University, Cekmekoy, Istanbul, Turkey, sinem.atakan@ozyegin.edu.tr, Richard Bagozzi, Carolyn Yoon

Self-production, the active engagement in the creation of end products by consumers, increases the amount of money one is willing to pay for the product (Norton 2009) and evaluation of the product (Troye and Supphellen 2012). Production consists of input specification (design), realization (physical production), and consumption of outcome (Lengnick-Hall 1996). During input specification, the characteristics of the product/service (e.g. physical layout, design, quality) are decided on. During realization stage, the physical creation and execution of the product/service takes place. Consumer participation may primarily take place during the input specification (e.g. while designing a bag on a website) or realization stage (e.g. when cooking using a dinner kit). Yet again, consumers may be engaged in both stages. We do not know whether various stages of the production process differentially influence the consumer's assessment of, and relationship with, the self-made product. We integrate findings from person-object relationship (Belk 1988), self-production, self-design (Franke et al. 2010), touch (Krishna 2012) and organizational behavior (Dutton et al. 1994) literatures to explore how engagement of consumers at different stages of the production process influences the consumer's evaluation of, and relationship with, self-made products. Three experiments reveal that engagement during the input specification and realization stages enhance attachment to (the affect dimension of person-object relationship) the self-made product. However, only engagement during input specification increases identification (the cognitive dimension of person-object relationship) with the product. We contribute to the literature on self-production, co-production, and do-it-yourself products.

2 - Impact of Packaging Transparency on Product Preference

Meng Zhu, Johns Hopkins University, 100 International Dr., Baltimore, MD, 21202, United States of America, mengzhu@jhu.edu, Darron Billeter, Jeff Inman

In the current work, we study the impact of packaging transparency on product preference. Firms can select to encase a product in many different levels of packaging transparency, yet firms often choose to present their products in non-transparent packaging. We suggest that consumers will exhibit greater preference for products in transparent as compared non-transparent packaging even when explicitly controlling for product freshness and quality. We argue this is the case because that (1) people associate the notion of 'transparent' with honesty, openness, candidness, and forthcoming behavior (2) they often make inferences and judgment about products based on non-diagnostic packaging cues that are salient in the purchase context (such as transparency) rather than diagnostic product information (such as ingredients) that is not salient in the local decision context (e.g. Wansink and Van Ittersum 1999; Zhu, Billeter and Inman 2012). Thus, products covered in transparent packaging will be viewed as more trustworthy as compared to the exact same products presented in non-transparent packaging, leading to greater purchase intention for and higher product choice of transparent products. Results from six experiments demonstrate that transparent (as compared to non-transparent) packaging enhances perceptions of product trustworthiness (even when explicitly controlling for product freshness and quality) and leads to higher purchase intention and increased product choice. We identify perceptions of product trustworthiness as the mediator and physical appeal of products as an important boundary condition for this effect.

3 - An Exploratory Study on Consumer's Esthetics Perception of Logo Design

Yu-Shan Athena Chen, National ChengChi University, No.37, Ln. 401, Jinhu Rd., Neihu Dist., Taipei, 114, Taiwan - ROC, athena@nccu.edu.tw, Wei Hao Yang, Lien-Ti Bei

This research investigates the logos' esthetics elements, and the influence of self-regulatory focuses on consumer perceptions of logos' esthetics judgment. We take 10 in-depth interviews and elicit eight key esthetics elements on logo design from the data consisted of over 780 minutes of audio record which transcribed to more than 341 pages of typed documents. The study demonstrates four concrete esthetics elements - symmetrical, color saturation, color harmony, barycenter balance, laconic design; three abstract esthetics elements – modernistic, meaningful, un-regular design. Furthermore, consumer's self-regulatory focus moderates his/her beauty perception of logos. The concrete esthetics elements may be successfully employed for prevention consumers and they may be used to determine whether a logo is beauty or not. The promotion consumers employed the abstract esthetics elements to judge a logo's beauty rather than prevention consumers. These findings address the fundamentals for logo design, and suggest that firms should design logos with concrete esthetics element for the market with prevention consumers. However, logos design with abstract esthetics elements may be appreciated by promotion consumers.

4 - Natural Scarcity and Product Valuation

Robert Kreuzbauer, Assistant Professor, Nanyang Business School, S3-B2C-104, Nanyang Avenue, Singapore, 639798, Singapore, robert.kreuzbauer@gmail.com, Dan King, Shankha Basu

We introduce natural scarcity as a fundamental concept of product valuation. According to commonly held assumptions in marketing research and practice, consumers attach value to products when they are scarce, especially for products that are preferred because of their exclusivity ('what's scarce is good'). However, in a series of experimental studies we show that a scarcity heuristic only applies to situations of natural scarcity which means that there are natural constraints that lead to scarcity. Typical examples would be products that are so difficult to make (e.g. luxury and premium products) that the company could not provide enough supply to satisfy consumer demand. Natural scarcity can occur in various forms of special skills or other kinds of resources. Our concept is based on the theory of costly signaling (natural scarcity as an honest and non-imitable signal of fitness) and is able to explain various phenomena of prestige-, premium- and luxury-goods consumption. In particular it can explain why certain products, despite the company's effort, are not perceived as prestige or luxury goods.

■ TA07

07- Monterosa 2

Entertainment Marketing

Contributed Session

Chair: Sanjay Sisodiya, Assistant Professor of Marketing, University of Idaho, 875 Perimeter Dr MS 3161, Moscow, ID, 83844, United States of America, sisodiya@uidaho.edu

1 - Role of Risk and Incentives in Contracting between Movie Distributors and Exhibitors

Nina Baranchuk, Associate Professor, University of Texas at Dallas, 4449 White Rock Ln, Plano, TX, 75024, United States of America, nxb043000@utdallas.edu, Andrei Strijnev, David Switzer

Theoretical literature studying contracts between movie distributors and exhibitors has investigated the following two factors determining the optimal contract shape: (1) uncertainty about movie demand and (2) alignment of incentives concerning the choice of display timing and length. The two factors are not mutually exclusive, and thus their influences may be present in the data at the same time. However, existing empirical literature is scarce due to lack of data on contracts between distributors and exhibitors, and focuses only on demand uncertainty (Filson et al.). We contribute to the empirical literature on movie contracts by investigating the relative importance of the two factors. We offer new empirical tests of the theoretical predictions using contract agreements between a major theater chain located in St. Louis, MO and movie studios for 135 movies displayed in years 2001 and 2002. Our analysis provides empirical support for when different contract regimes may be optimal depending on the two factors. Our findings indicate that the changes in the distributor's share of box office revenues over the display period are strongly related to the length of the display period. Specifically, a faster decline in the distributor's share corresponds to a shorter display time.

2 - Competitive Market Structure of Popular Music Industry

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Understanding competition landscape or market structure of entertainment industries is challenging due to a large number of products, nearly flat-pricing, unique characteristics of each product, and difficulties in ex ante quality evaluation. Thus, the producers in entertainment industries often find that it is difficult to identify their competitors set and the extent of competition effects on their revenue. In this paper, I attempt to empirically measure the competition effects on the revenue of both rival firms (business stealing) and own firm (cannibalization) in popular music industry, using a recently proposed market structure inferring method. To measure the competition effects, I incorporate K-pop musicians' weekly digital music sales data into the dynamic market-structure perceptual map that is inferred from both formal news media and informal user-generated content on the Web. The results suggest that there exist significant competition effects on music sales depending on brand positioning. In addition, I find dissimilar representation of market structure by different information sources: news media and user-generated content. This paper makes at least two contributions: First, I provide evidence on the competitive market structure of music industry and how brand positioning influences product sales in dynamic fashion using economical and simple method. Second, to the best of my knowledge, this is the first attempt to empirically measure the business stealing and cannibalization effects in the music industry.

3 - Testing Resources Allocation and Their Effects on Firms' Performance: A Resource-Advantage Theory Perspective in Sport

Aseel Al Ghamdi, PhD Candidate, University of Guelph, Dept. of Marketing and Consumer Studies, Guelph, ON, N1G 2W1, Canada, aalghamd@uoguelph.ca, Vinay Kanetkar

The sport entertainment literature has been growing dramatically due to its importance as a marketing avenue for profit generation to sport organizations. One important aspect of this field is concerned about the relationship between resource management and relative performance outcomes. Given the annual budget spending limits by sport organizations, where should sport teams allocate their resources to achieve maximum performance? We will use the Resource-Advantage Theory of Competition (Hunt and Morgan, 1995, 1996 and 2005) to get some insights on resource management and propose alternative assessment models on an effort to test the relative value of resources and their effects on firms' performance in different situations. These models will improve the understanding on resource prioritization and its effect on performance. We used the National Hockey League as the sport context to test our assumptions to further advance the R-A theory research by identifying how different resources influence the outcome of sport franchises. To understand the impact of budget spent on various players (resources) in NHL in relation to total points earned (performance), several linear regression models were conducted on 5 consecutive NHL seasons. We found that capital spent on defenders and/or forwards did not significantly result in higher total points, while budget spent on goalkeepers did significantly influence total points earned at the end of NHL season. Therefore, as sport teams allocate more of their annual budgets on goalkeepers, they achieve greater total points, which were explained by the highest estimated parameters goalkeepers had in the assessment models used.

4 - Why do Products Get Sequels? A Launch Decision Model with Risk Aversion

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Many entertainment markets, such as video games or movies, show large degrees of sequelitis. Many products receive sequels and concerns exist whether firms in these industries sufficiently develop new concepts. We develop the first empirical product launch decision model that accounts for risk aversion and show that risk aversion is a prime driver of this phenomenon. We estimate our model on a rich data set from the console video game industry consisting of 185 consecutive months of sales, price, and advertising information for a total of 7,744 games. We find that the high tendency of publishers to rely on sequel releases is mainly driven by the uncertainty reducing potential of sequels and an increasing quality sensitivity of consumers over sequel lines. We use a simulation approach to demonstrate the effect sizes and show how many sequels would be released if they did not incorporate these factors in their decision-making. Furthermore, we show that the main reason for decreasing sales along sequel lines stems from low investments in product quality by the publishers.

5- Timing of Line Extensions: An Investigation of Movie Sequels

Sanjay Sisodiya, Assistant Professor of Marketing, University of Idaho, 875 Perimeter Dr MS 3161, Moscow, ID, 83844, United States of America, sisodiya@uidaho.edu, Berna Devezer, Steve Shook

Movie products have short product life cycles, and it is critical to consider the factors influencing revenue generation for these products (Hennig-Thurau, Houston, and Heitjans 2009). While a variety of factors have been identified that can improve box office performance (e.g., Chang and Ki 2005; Brewer, Kelley, and Jozefowicz 2009), the factors affecting the success of movie sequels remain under-researched. Through the development of movie franchises, studios introduce sequels in order to capture brand equity established by parent brands in a franchise of movies (e.g., Sood and Dreze 2006). Research has shown that sequels outperform non-sequels (Dhar, Sun, and Weinberg 2012), thus it is important to consider factors that may enhance success of movie sequels. Timing is known to be a key factor and may be important to consider with movie launch strategies (Calantone, Yeniyurt, Townsend, and Schmidt 2010). Some research has found a decay effect with sequels (Basuroy and Chatterjee 2008), but there may be some point where an anticipation effect could occur as consumers wait for the next iteration in a franchise. We investigate these perspectives further by considering a U-shaped relationship for timing between releases. Using a database of 150 movie sequels, we test our hypothesis using worldwide box office revenue as a measure of line extensions' success. After controlling for production elements, expert and viewer opinion, and franchise performance, we find support for the curvilinear relationship between the release of sequels and box office performance, indicating that a decay effect does occur followed up with a buildup in anticipation.

■ TA08

08- Edelweiss

Pricing Issues

Contributed Session

Chair: Jonathan Seaton, Reader in Business Economics, Loughborough University, School of Business and Economics, Loughborough, United Kingdom, j.s.seaton@lboro.ac.uk

1 - Should Event Organizers Prevent Resale of Tickets?

Ozge Sahin, Assistant Professor, Johns Hopkins University, 100 International Drive, Baltimore, MD, United States of America, ozge.sahin@jhu.edu, Izak Duenyas, Yao Cui

We are interested in whether preventing resale of tickets benefits the capacity providers for sporting and entertainment events. Common wisdom suggests that ticket resale is harmful to event organizers' revenues and event organizers have tried to prevent resale of tickets. For instance, Ticketmaster has recently proposed paperless (non-transferrable) ticketing which would severely limit the opportunity to resell tickets. Surprisingly, we find that this wisdom is incorrect when event organizers use fixed pricing policies, in fact event organizers should attempt to reduce the cost of resale in this case. Even when multiperiod pricing policies are used, we find that an event organizer may still benefit from ticket resale if his capacity is small. Given that limiting ticket resale by making it more difficult has resulted in adverse consumer reactions, we propose a novel ticket pricing mechanism of ticket options. We show that ticket options (where consumers would initially buy an option to buy a ticket and then execute at a later date) naturally result in reducing ticket resale and result in significant increase in event organizers' revenues. Furthermore, since consumer only risks the option price (and not the whole ticket price) if she cannot attend the event, options may be an easier sell to consumers than paperless ticketing.

2 - The Optimal Pricing of News Content

Adithya Pattabhiramaiah, Doctoral Student, University of Michigan, 701 Tappan Street, Room R4323, Ann Arbor, MI, 48109, United States of America, adithyap@umich.edu, S. Sriram, Shrihari (Hari) Sridhar

The increasing availability of alternative sources of news, especially free content at websites hosted by newspapers and news aggregators such as Yahoo has made paying for the print newspaper less attractive to readers, prompting print newspaper circulation declines. Significant losses in circulation and in advertising revenues have prompted daily newspaper publishers to identify opportunities to make up lost revenues. Over the last decade, average subscription prices of daily print newspapers across the U.S. have increased by 40-60% in order to stabilize revenues generated through paid circulation. The two main goals of this research are - a) to study the theoretical factors governing the counterintuitive phenomenon of rising prices under declining demand facing the newspaper industry, and b) to propose and evaluate alternative pricing schedules for newspaper firms facing changing market conditions. Our data comprise circulation and advertising revenues and costs for both the print and online versions offered by a top-25 U.S. regional newspaper. While newspaper firms' revenues arising from print newspapers have fallen continuously, revenues from online newspapers have gained somewhat given the increasing popularity of online news media. However, on average, online revenues still account for a miniscule 10% of total revenues, suggesting that for every dollar gained online the newspaper is still losing nearly seven dollars on its print newspaper. To investigate this in more detail, the proposed framework allows for co-dependence between both print and online readership as well as between advertising decisions on both formats, allowing us to better quantify the net implication of a price increase on overall newspaper firm revenues and profits.

3 - Pricing in Inflationary Times: The Penny Drops

Jonathan Seaton, Reader in Business Economics, Loughborough University, School of Business and Economics, Loughborough, United Kingdom, j.s.seaton@lboro.ac.uk, Ratula Chakraborty, Michael Waterson, Paul Dobson

We investigate micro pricing behaviour in groceries (the UK's most important consumer market) over eight years including the inflationary period of early 2008. We find behaviour sharply distinguished from most previous work, namely that overall basket prices rise but more individual prices fall than rise! This is consistent with retailers obscuring the fact of rising basket prices. We employ a significant new source of data that captures cross-competitor interplay in prices at a very detailed level. Unusually but importantly, our work takes into account that consumers buy baskets of goods, rather than individual products, when shopping at supermarkets.

■ TA09

09- Mimosa

Customer Relations Management

Contributed Session

Chair: Yantao Wang, Assistant Professor of Marketing, Seattle University, 901 12th Ave, Seattle, WA, 98101, United States of America, wangya@seattleu.edu

1 - A Conceptual Model to Measure Success of the Complaint Management of Companies

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Customers usually have high expectations for the goods and services which they purchase. They generally voice their opinions, if they were not satisfied. Offering defensive marketing strategies is very important to be successful in today's competitive business. Offense is made to generate new customers where defense is made to keep current customers. Complaint management can be considered as defensive marketing strategy because of its goal which is 'to minimize customer turnover by protecting products and markets from competitive inroads' (Reinwald, 2009) This article shows the importance of customer complaint management systems and the effects to customer loyalty. In addition to that a conceptual model to measure the success' of the complaint management behavior of companies is offered.

2 - How Relational Involvement Moderates Satisfaction Paradox under Competition? An Industrial Case

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Customers stating to be satisfied may still be lack of loyalty, and the phenomenon was defined as satisfaction paradox. Three factors are found to moderate the paradox: including customer characteristics, relational characteristics, and marketplace characteristics. Customer relational involvement, including the number and types of relational activities, is in particular important to study for industrial satisfaction paradox. But the effect is not systematically evaluated. Besides, almost all of previous research has been conducted in single brand contexts. Effect of competition is grossly overlooked. As a result, this study aims to validate satisfaction measurements and evaluate the moderating effects of relational involvement under competition using an attribute threshold multinomial logit model. We design multiple measurements to highlight the existence of different phases of satisfaction in a relationship and a paradox indicator is developed to conclude overall effect. Samples of 124 high-tech customers using air express service are collected for empirical study. The analysis result validates the five satisfaction measurements for customer loyalty, including price, delay compensation, customer privacy, flexible delivery, and cargo tracing. Meanwhile, five relationship building programs are classed into financial, social and structural bonds according to confirmatory factor analysis. They are assessed to be all effective in mitigating satisfaction paradox through the analysis of a linear regression model. Finally, in terms of customer behavior, relational breadth is more effective to identify relational involvement, than relational depth. Relational age on the other hand accounts for no effect.

3 - Services Diffusion under Internal and External Incentives

Tarek Ben Rhouma, HEC-Montréal, 3000, Chemin de la Côte, Sainte-Catherine, Montréal, QC, H3T 2A7, Canada, tarek.ben-rhouma@hec.ca, Georges Zaccour

How much to invest in the acquisition of new customers and the retention of existing ones? It is certainly the question most asked by customer relationship managers. This issue gains more importance with subscription services for which customer relationship affects hugely the service diffusion and the customer profitability. The few studies that have focused on this issue consider that customer's decision to subscribe and stay with the service depends only on marketing efforts provided by the firm (internal incentives). Thus, the presence of other external incentives (switching costs, personal and social incentives, etc.) has always been ignored. In this work, we propose a new diffusion model based on two processes: customer acquisition and customer retention. The firm should determine the optimal CRM expenditures in the presence of external incentives. By using dynamic programming, we introduce a new approach to calculate optimal acquisition and retention spending to maximize the customer equity. We then analyze the effect of a variation in the effectiveness of internal incentives as well as the magnitude of external incentives on optimal CRM policies.

4 - Some Customers Rather Leave without Saying Goodbye

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In this research we study not only when customers churn, but also how they do it. In particular, we analyze the case in which companies might, but not necessarily do, observe customer attrition. This is the case of many online-based services where customers have the choice to stop interacting with the firm either by formally terminating the relationship (e.g., canceling the account) or by simply ignoring all communications coming from the firm. Consider, for example, a Groupon subscriber who wishes to stop interacting with the firm. She can either click on the "unsubscribe link" hence formally terminating her relationship with the firm, or she can direct all e-mails from Groupon to her junk folder. Similar behavior can also occur in social network sites (e.g., LinkedIn), web retailers (e.g., eBay), web/e-mail services (e.g., Gmail) and other offline settings (e.g., credit cards with no fee). In all these business settings, customers not only decide when to leave, but also whether to say goodbye. In this paper we develop a model that incorporates both termination of the relationship that is directly observable to the firm and latent attrition due to inactivity. We apply the model in the context of a web-based deals site, where multiple sources of daily usage/activity (e.g., e-mail openings, clicks) as well as unsubscription behavior are observed. We find substantial differences in usage behavior between those customers who 'visibly' churn and those who do it 'silently'. We discuss managerial implications of this research.

5- Beyond Sunk-Cost: How Commitment Contracts Influence Consumption

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This paper looks into how contract attributes influence consumers' post-purchase consumption decisions. The existing literature in economics and in behavioral research focus on the rationality of both firms offering commitment contracts and consumers buying commitment contracts. In this paper, we investigate whether and how purchased commitment contracts influence consumers' subsequent consumption decisions through the dynamically changing attributes of the contracts. Using three years of individual contract purchase and consumption information in data provided by a health club, we implement a person-contract level fixed effect model to correct for endogeneity in key variables of interest, mostly caused by consumers selecting into commitment contracts for the next period of time based on their estimates of future demand. The richness of the data also allows me to control for many confounding factors that are specific to each individual consumer as well as those environmental influences that are common to all consumers. Analysis results confirm the positive impact of sunk-cost on consumers consumption decisions. They are found more likely to attend classes the higher the remaining sunk-cost balance associated with a commitment contract. The impact of commitment contract on consumption does not vanish when sunk-cost comes down to 0, rather it manifests itself as the effect of potential saving. Consumers are more likely to attend classes on a given day if they anticipate a higher amount of saving with additional consumption. In addition, the effects of sunk-cost and saving are both moderated by one's cognitive ability to track consumptions. Therefore, the further along one is into a commitment contract, the weaker these effects become.

■ TA10

10- EMBA 1

Brand Equity and Brand Management

Contributed Session

Chair: Pascal Kottemann, Bielefeld University, Universitätsstraße 25, Bielefeld, Germany, pkottemann@wiwi.uni-bielefeld.de

1 - 20 Years of Brand Valuation – What Do We Learn from 24,000 Brand Values?

Alexander Himme, University of Cologne, Albertus Magnus Platz, Cologne, Germany, himme@wiso.uni-koeln.de, Marc Fischer

Brands influence the decisions of customers, managers, investors and government authorities. All these stakeholders have a high interest in quantifying the value of a brand in monetary units. As a result, numerous brand valuation methods have been developed and applied to thousands of brands in the last 20 years. However, the estimated brand values differ significantly for the same brand as well as across brands and time. Executives ask whether they should invest into brand building and how to measure the financial value of brands. They would like to know which industry, market, and firm conditions favor the growth of brand value. In addition, they ask for guidance through the jungle of methods of brand valuation. To answer these questions, we compiled a unique database that includes more than 24,000 financial brand equities that were obtained from 17 different brand-valuation methods covering commercial providers (e.g., Interbrand), academic methods (e.g., Simon/Sullivan 1993), as well as real market transactions such as M&A transactions. The database includes the global financial value of more than 3,800 brands originating from more than 70 countries in the period 1992-2011. We match the brand values with financial data for parent firms from COMPUSTAT and CRSP. We apply a meta-analytic approach to reveal systematic differences in brand values that are due to time, product, geography, market, valuation approach, and firm-specific factors (e.g., investments into advertising and R&D).

2 - Sustained Growth – An Objective Customer-Market Measure of Brand Equity

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This study responds to the need for an objective consumer-based measure of brand equity. Focusing on consumers' actual purchase behaviours, this research propose a relatively simple measure of brand equity as a function of sustained growth over the long term. Although customers react in different stages of the purchase process, in long term, customers' perceptions, and attitudes towards brands are translated into their actual purchase behaviour. In a competitive market, where customers have choices, are not forced to purchase from or stick to a certain brand, and can easily switch from brand A to B, a negative brand attitude, and perception cannot be translated into sales increase in long term. Thus a continuous growth with low fluctuations over the long term can be concluded as the customers' positive mind set towards a brand, a greater performance, and ultimately stronger brand. The authors provide theoretical basis for the measure and compute it across several industries and test its validity by comparing the results with other academic and industry measures of brand equity. The proposed Brand Equity Index (BEI) as the ratio of growth to sales fluctuations multiplied by market share over a 5-year and 10-year periods, is applicable in corporate, brand, or sub-brand levels, across industries and countries. The results show the reliability of the measure in reflecting the outcome of the brand building strategies in long term. Finally we incorporate the BEI into the firm valuation models to capture the monetary value and explanatory power of the proposed BEI. Key words: brand equity, brand performance, sustained sale growth, long term.

3 - From Hedonic-Utilitarian Value to Brand Loyalty: The Role of Brand Trust, Affect and Risk Aversion

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The authors examine brand trust, brand affect and risk aversion as linking variables in the chain of effects from hedonic and utilitarian value to two aspects of brand loyalty; behavioral loyalty and attitudinal loyalty. The analyses drawn on 200 web based questionnaires reveal that when products have more hedonic value than utilitarian value, consumers feel more trust and affect towards brands. Interestingly, no impact of utilitarian value has been found on these two latter concepts. Moreover, the results suggest that while brand trust and brand affect are important antecedents of attitudinal loyalty, behavioral loyalty is only facilitated by brand affect. Additionally, it is found that risk averse consumers may refrain from buying products with unknown brands but rather they prefer the ones that they have developed brand affect for. However, risk aversiveness contributes to attitudinal loyalty both directly and through brand affect and brand trust. Lastly, these relationships have been retested under the moderation of product involvement. It is found that whether highly involved or not, consumers become attitudinally or behaviorally loyal to brands when they perceive hedonic value but not utilitarian value. Managerially, it could be interpreted that utilitarian value is regarded as point of parity, whereas hedonic value is the source of point of difference.

4 - Brand Concept Maps in Computer-Aided Interviews: Challenges, Benefits and Empirical Findings

Pascal Kottemann, Bielefeld University, Universitätsstraße 25, Bielefeld, Germany, pkottemann@wiwi.uni-bielefeld.de, Reinhold Decker, Martin Meissner

Brand image, as an agglomeration of perceptions, beliefs and associations consumers connect to a brand, constitutes one of the key factors for strategic brand management. Consequently, several qualitative, quantitative as well as combined techniques have been developed for the measurement of brand-related associations. In 2006, John et al. introduced Brand Concept Maps (BCM) as a new technique for measuring consumers' brand associations as well as the structure of these brand associations. In its original form, the BCM method has been applied in a laboratory setting with poster boards and laminated cards. These requirements, however, might hinder market researchers from deploying the full potential of the BCM method due to the fact that the validity of market research studies particularly depends on generating large and representative samples. Against this background, the aim of this paper is threefold: first, we identify major challenges when transferring the original BCM method to computer-aided interviews and discuss key benefits that result from an application of the approach in this setting; second, we propose a way to implement BCM in online market research studies; third, we compare BCM data from personal and computer-aided interviews in two empirical studies investigating well-known brands from two different industrial sectors (consumer electronics, fashion clothing). First results indicate high convergent validity between data sets from personal and computer-aided interviews while significantly reducing the overall interview length at the same time. References: John DR, Loken B, Kim K, Monga AB (2006) Brand concept maps: A methodology for identifying brand association networks. J. Marketing Res. 43(4):549-563.

■ TA11

11- EMBA 2

Piracy

Contributed Session

Chair: Alexa B. Burmester, Assistant Professor, University of Hamburg, Welckerstrasse 8, Hamburg, 20354, Germany, Alexa.Burmester@uni-hamburg.de

1 - The Relationships between Consumers' Usage of Experience Goods, Sales Performance and Piracy

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Experience goods such as music albums or computer games have in common that they show an adoption peak upon release but are consumed long after adoption. As a result, usage patterns are likely more informative of current brand attachment and future sales performance than are adoption data. Another characteristic of experience goods is that piracy continues to pose a serious threat to their profitability. Extant literature largely ignores the role of usage after (legitimate or illegitimate) adoption and has found inconsistent results for the impact of piracy. Against this background, we propose a framework that assesses how consumers' usage of experience goods (1) drives future brand sales performance and (2) affects our understanding of the role of piracy. We apply our framework to the music industry. Specifically, we use rich behavior tracking data on the music listening behavior of about 7,000 consumers and combine this information with weekly chart position data, illegal music downloads, and a broad range of social media activities for a sample of 376 artists from the US and Germany. Our results highlight the relevance of usage as an important facet of brand attachment and shed light on the role of piracy.

2 - Cannibalization or Sampling? Quantifying the Quality of Piracy and its Effect on Experiential Goods

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Piracy and counterfeiting is a concern for any new product manufacturer. Most recently, the film industry has stepped up enforcement of film piracy to prevent the loss in revenues that befell the music industry with peer-to-peer file sharing. Previous research has shown that quantity of downloading pirated content has an effect on revenues. What is missing from the literature is the role quality plays. This paper quantifies the quality aspects of piracy, asking two primary questions: what drives the quality and quantity of pirated content online, and what effect does piracy quality have on films still in theaters? This paper adds to extant literature by using a unique data set of first-run theatrical films released in the U.S. in the spring and summer of 2012 with pirate file search results on the world's most visited pirate website during the same time. The results show there is an association with quality (desirable) films associated with higher quality piracy offerings, and that quality piracy is associated with box office revenues.

3 - The Effect of Pre-Release Movie Piracy on Box-Office Revenue

Alan Montgomery, Carnegie Mellon University, Tepper School of Business, 5000 Forbes Ave, Pittsburgh, PA, 15213, United States of America, alanmontgomery@cmu.edu, Param Singh, Liye Ma, Michael Smith

The availability of digital distribution channels raises many new challenges for managers in the media industries. This is particularly true for movie studios where content can be stolen and released through illegitimate digital distribution channels before, or shortly after, the legitimate release date. In response to this potential threat, movie studios have spent millions of dollars attempting to protect their content from unauthorized release, to prosecute those who might distribute or consume pirated content, and to lobby governments to strengthen anti-piracy laws. However, surprisingly, there has been very little rigorous research to analyze whether, and how much, movie piracy cannibalizes legitimate sales. In this paper, we analyze this question in the context of pre-release movie piracy. Using data collected from a unique Internet file-sharing site, we find that pre-release piracy significantly reduces a movie's market potential, although movies with pre-release piracy exhibit a slower sales decline over time. We estimate that the net effect of pre-release piracy can be up to an 8% reduction in box office sales compared with piracy that occurs at release. By comparison we estimate that box office revenue would increase by 24% if no piracy were to occur. Our study contributes to the growing literature on piracy and digital media consumption in the Information Systems community by presenting evidence of the impact of Internet-based movie piracy, by taking a pre-release perspective to strengthen causal inference, and by differentiating the effect of pre-release movie piracy from the other types of piracy that the extant literature has previously considered.

4 - Accepting or Fighting Piracy – Can Piracy Be Reduced by Optimizing Timing & Pricing Strategies?

Alexa B. Burmester, Assistant Professor, University of Hamburg, Welckerstrasse 8, Hamburg, 20354, Germany, Alexa.Burmester@uni-hamburg.de, Michel Clement, Felix Eggers, Tim Prostka

The rise of the Internet and new IS services have led to wide scale illegal distribution of digital products, such as music, movies, games, and e-books. Managers in the entertainment industry try to compete against pirates by introducing new pricing and timing strategies, e.g., in the motion pictures industry. We analyze whether firms should fight piracy by providing specific offers that maximize the utility for piracy segments or if they should simply accept a certain level of piracy because they will not be able to gain more business due to cannibalization effects. We present a choice model for media products in which we account for the pirated alternatives and predict the revenues of new timing and pricing strategies based on (piracy corrected) choice shares. In two large-scale empirical studies, we confirm the validity of the model in the context of movie and book choice. Based on the empirical results, we simulate revenues for over 17 million potential market configurations. The results are highly consistent and show that piracy has a substantial effect: approximately one-third of the revenue potential is lost. However, our simulations reveal that new timing and pricing decisions have very limited impact on revenue. Thus, from a managerial perspective, it is very difficult to substantially increase revenues by strategically introducing new products that are targeted specifically toward piracy segments.

■ TA12

12- Geneve

Store Brand Management

Contributed Session

Chair: Erik Bushey, Doctoral Candidate, University of Illinois, 350 Wohlers Hall, 1206 South Sixth Street, Champaign, IL, 61820, United States of America, bushey1@illinois.edu

1 - Managing Store Brands

Woochoel Shin, Assistant Professor of Marketing, University of Florida, P.O. BOX 117155, Gainesville, FL, 32611, United States of America, wshin@ufl.edu, Wilfred Amaldoss

Store brands account for one out of every four products sold in US supermarkets and drug stores. It is a challenge for national brand manufacturers to manage these store brands because of the pricing power of the retailer. In this paper, we theoretically investigate how a national brand manufacturer can handle the store brand challenge under different market structures. In a bilateral monopoly, we show that the national brand manufacturer cannot prevent the entry of a store brand by making a side payment to the retailer. The national brand manufacturer, however, can increase total channel profits by supplying the store brand and in the process better differentiating the qualities of the products. When retailers compete for customers, the store brands are very crucial for retailers' profits because retailers compete away potential profits from the national brands. Yet, in such circumstances, we show that the national brand manufacturer can effectively prevent the entry of store brands by making side payments to retailers. On the other hand, when manufacturers compete for customers visiting a store, no manufacturer takes the initiative to prevent the entry of the store brand. Finally, although store brands are commonly viewed as lower quality products, we see examples of high-quality and mid-quality store brands in the marketplace. Our analysis clarifies how a national brand manufacturer should set the relative quality of its product under different market structures.

2 - Private Label Tiers: A New Dimension of Competition between Private Labels and National Brands

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One of the most salient changes in the grocery environment is the growing success of private labels (PLs). Nowadays, sophisticated retailers are offering three-tier PL products, ranging from cheap and low quality own labels (i.e., budget PLs) to somewhat less expensive and comparable quality PLs (i.e., standard PLs), to premium quality and high value added PLs that are not priced lower than national brands (NBs) (i.e., premium PLs). Our paper studies the competition between the different PL tiers and NBs within a retailer for a specific category together with the category profit implications for a retailer using U.K. household panel data between 2007 and 2009 for two categories (i.e. cereal & canned soup) and for the top-3 retailers in the U.K. (i.e. Tesco, Asda & Sainsbury). To answer our research question, we adopt recent empirical IO techniques that enable us to derive the price elasticity of demand together with changes in overall category profit of the retailer. First, we apply a demand model to compute own and cross price elasticities in order to derive substitution patterns between PL tiers and NBs. Second, different supply models allow us to derive retailer profit margins in order to estimate category profit under different scenarios (e.g. the hybrid model, non-linear pricing models). Finally, we perform counterfactual simulations in order to obtain deeper insights into the sense and nonsense of introducing a PL tier by the retailer, also the sense and nonsense of price changes of NBs as a reaction to PL tiers or other changes in the category assortment.

3 - Spillover Effects, Private-Label Brands, and Category Profitability Enhancement

Mouna Sebri, HEC Montréal, 3000 Côte Sainte Catherine, Montréal, QC, H3T 2A7, Canada, mouna.sebri@hec.ca, Georges Zaccour

The growth of retailer-owned brands represents one of the most notable trends in marketing in recent decades. Indeed, they constitute 15% of the sales value of fast-moving consumer goods worldwide (ACNielsen 2010). In 2005 and compared to the year before, global private label sales grew by 5%, outpacing manufacturer brands (growing by only 2%). The purpose of this study is to investigate factors that contribute to this fast-growing products development. We ask whether the PL performance in a product category lies with the specific characteristics of the aforesaid category or whether spillover effects between product categories exist. In case of the presence of such effects, we would like to investigate whether these spillover effects are attributed to any specific dynamic between product categories (complementarity, substitutability, leadership, etc.). Finally, this study aims to examine the way factors related to the categories as well as inter-category interactions can help in the overall enhancement of product-categories performance. For example, does an increase in the private-label performance in a product category such as shampoo leads to boost conditioner PL performance, total hair-care category sales, and profitability? By adopting a structural equation model, we allow to create simultaneous-equations system in order to offer an understanding of PL market mechanisms by investigating empirically the factors behind these categories performance using a large, cross category, time-series dataset and following an encompassing approach including a number of relevant category related determinants. This approach is attractive because it combines market structure, categories heterogeneity, and potential factors sensitivity in a unique framework.

4 - Suppliers Caught in Supermarket Price Wars: Victims or Victors?

Francesca Sotgiu, HEC Paris, 1 Rue de la Liberation, Jouy en Josas, France, sotgiu@hec.fr, Katrijn Gielens

Retailers often initiate price wars in which they engage hundreds of brands across and within the same categories. Consequently, the competitive position of individual brands may not necessarily improve, making the performance outcome for individual brands hard to predict. Likewise, the impact on brand performance after the price war, when prices are restored, is also unclear. Moreover, during price wars not all brands may be affected simultaneously. Usually, retailers announce price reductions for a substantial, though not fully exhaustive, set of brands. Also after the price war, not all brand prices are restored simultaneously. This implies that not all brands are directly involved in the price war or post-price war. This paper aims to assess the consequences of these direct and indirect involvements during and after a price war on brand performance. To do so, we evaluated the effects of a four mutually exclusive price war scenarios (direct price war, indirect price war, direct post-price war and indirect post-price war) on the sales and market share of 149 brands at the four retail chains in the Netherlands, across 25 product categories during and after a price war, over five years. We find contrary to prior believes that 1) brands have no incentive to stay out of a price war; 2) after the price war, premium priced brands can increase their prices, without incurring major losses; 3) economy brands have a hard time restoring their prices after the price war.

5- Retailer Introduction of Store Brands in the Presence of a Category Captain

Erik Bushey, Doctoral Candidate, University of Illinois, 350 Wohlers Hall, 1206 South Sixth Street, Champaign, IL, 61820, United States of America, bushey1@illinois.edu, Udatta Palekar

In this paper we study the moderating effects that category captainship has on retailer, manufacturer and channel profits when a retailer decides to offer a store brand. This paper contributes to the existing literature in that it is the first to examine the role that manufacturer competition has on retailers' s store brand sourcing decisions; either through an outside option or through one of the manufacturers selling within the category (inside option). Previous studies have found that manufacturers have difficulty competing with store brands when the store brands are sourced through outside options. Using a game theoretical model consisting of two national brand manufacturers, one retailer and one outside sourcing option, we address the following research questions: 1) Under what conditions will a retailer decide to source their store brand through an outside option as opposed to an inside option? 2) How does category captainship affect the retailer's decision? 3) What impact does category captainship have on manufacturer, retailer and channel profits? We find that manufacturers will only elect to produce store brands for the retailer when the wholesale price of outside options is sufficiently low. When the wholesale price of outside options is high, the retailer earns the majority of their profit from sales of the national brands, resulting in higher wholesale prices for the national brands and greater profits for the manufacturers. Further we find that a retailer will only elect to source their store brand through inside options when the wholesale price of outside options is sufficiently high. When the wholesale price for outside options is low, manufacturers are forced to lower their wholesale prices, resulting in greater profits for the retailer.

■ TA13

13- Luzern

Daily Deals

Contributed Session

Chair: Georgios Zervas, Yale University, 51 Prospect St., New Haven, CT, 06511, United States of America, zg@cs.yale.edu

1 - Consumer Regret and Choice Behavior under Uncertainty

Pavel Kireyev, Harvard Business School, Soldiers Field Road, Boston, MA, 02163, United States of America, pkireyev@hbs.edu, Vineet Kumar, Xueming Luo

We propose a structural model to conceptualize and quantify consumer regret under uncertainty, where consumers have a limited time due to a deadline to exercise an option to consume a product. A forward-looking consumer anticipates future regret resulting from present and future decisions, and makes choices to not just maximize utility, but also minimize anticipated regret. Although regret is important and commonly theorized effect in many marketing settings, it has not been empirically modeled and investigated. We thus provide a framework to explicitly incorporate the effect of anticipated regret on choice behavior. We operationalize our model on data from a groupon-like company based in China, using restaurants deals to quantify the regret effect. Anecdotal evidence of 'regret' in the groupon setting is common in the trade press, and we demonstrate empirical support for the view that consumers behave as if they experience regret, i.e. they make different choices when faced with an imminent deadline than they would in its absence. Finally, we conduct counterfactuals to investigate how regret is affected by design of the groupon, examining consumer behavior when: (a) a longer deadline is used, (b) consumers have an option to extend the deadline, and (c) when the price paid by the consumer is still available for redemption (as required by law in some countries).

2 - The Dynamics of Groupon: Repeat Purchase and Word-of-Mouth after the Deep Discount

Ela Ari, Ozyegin University, Istanbul, Turkey, ela.ari@ozu.edu.tr, Koen Pauwels

Deep discounts sites such as Groupon have caused quite a stir amongst consumers and merchants. While research has started to look at short-term consumer reaction and business profitability, the long-run viability for merchants depends on the repeat-purchase behavior of consumers brought in by such deals. Unfortunately, many service providing companies report heavy losses from engaging in this activity, as the deep discount draws a lot of one-time customers, but not repeat customers. Recent research has looked at short-term consumer reaction and business profitability, but not yet at repeat purchase and word-of-mouth behavior. We examine what drives customers to buy online deep deals, to repurchase at regular and discounted prices based on service provider, deal conditions, experienced service quality and consumer profiles, and to generate word of mouth after deals. Study 1, which is a scenario based experimental study reveals how price discounts, distance from home/work, and reputation of the local businesses interact to drive sales on Groupon like sites and how consumer motivation types such as need for affiliation and need for power drive the repurchase and need for achievement, and need for affiliation drive word-of-mouth behavior after the sales. While high need for achievement people generate word-of-mouth by talking, high need for affiliation individuals do so by writing in social media. Study 3, is looking to the most popular category as restaurants, where price discount, distance, reputation and satisfaction are manipulated. The latest study also includes psychological variables as price consciousness, deal proneness, quality consciousness, involvement and variety seeking behavior. Our findings offer decision makers of the service providing companies as well as deal sites specific guidelines as to which consumer groups to target, how to structure online deals, how to increase word of mouth for their service offerings, and how to follow-up with first-time customers to increase repeat purchase and profitability.

3 - The Effects of SNS Affinity on the Sales Volume of Daily Deals in Korean Social Shopping Companies

Kyung Min Park, Yonsei University, School of Business, 262 Seongsanno, Seodaemun-gu, Seoul, 120-749, Korea, Republic of, kminpark@yonsei.ac.kr, Bokyung Lee

This paper investigates the question what drives the performance of daily deals that social shopping company provides. We found that SNS affinity helps to increase sales volume of daily deals, and that the higher level of discount rate and expected sales volume results in the greater sales volume. SNS affinity may attract more buyers by broadcasting good word-of-mouth about the product/service for SNS user. However, the effect of SNS affinity is moderated by deal characteristics such as price level, discount ratio, and minimum number of orders. We tested hypotheses with data on about ten thousand deals provided by TMON (www.ticketmonster.co.kr), a leading social shopping company in Korea. The empirical result implies SNS affinity of daily deals takes a critical role for social shopping success when online customers buy deals through social shopping service.

4 - The Groupon Effect on Yelp Ratings: A Root Cause Analysis

Georgios Zervas, Yale University, 51 Prospect St., New Haven, CT, 06511, United States of America, zg@cs.yale.edu

Daily deals sites such as Groupon offer deeply discounted goods and services to tens of millions of customers through geographically targeted daily e-mail marketing campaigns. In our prior work we observed that a negative side effect for merchants using Groupons is that, on average, their Yelp ratings decline significantly. However, this previous work was essentially observational, rather than explanatory. In our current work (full version available at http://arxiv.org/abs/1202.2369), we rigorously consider and evaluate various hypotheses about underlying consumer and merchant behavior in order to understand this phenomenon, which we dub the Groupon effect. For our analysis, we leverage a dataset we collected spanning tens of thousands of daily deals and over 7 million Yelp reviews. We investigate hypotheses such as whether Groupon subscribers are more critical than their peers, or whether some fraction of Groupon merchants provide significantly worse service to customers using Groupons. We suggest an additional novel hypothesis: reviews from Groupon subscribers are lower on average because such reviews correspond to real, unbiased customers, while the body of reviews on Yelp contain some fraction of reviews from biased or even potentially fake sources. Although we focus on a specific question, our work provides broad insights into both consumer and merchant behavior within the daily deals marketplace.

■ TA14

14- Zurich

Open Innovation

Contributed Session

Chair: Abrar Al-Hasan, University of Maryland, Robert H. Smith School of Business, College Park, MD, 20742, United States of America, aalhasan@rhsmith.umd.edu

1 - Does Customer Codevelopment Result in Better Products? Alignment with Product Development Approaches

Anna S. Cui, Assistant Professor of Marketing, University of Illinois at Chicago, 601 S Morgan Street, Chicago, IL, 60607, United States of America, ascui@uic.edu, Fang Wu

Active customer involvement in new product development (NPD) has become increasingly prevalent. More and more companies are allowing customers to more actively participate in NPD as co-developers. Compared to the traditional approach of gathering information from customers, this new approach provides more opportunities to utilize customer insights in innovation. However, it may also present challenges to the NPD process. This study argues that the benefits of involving customers as co-developers are dependent upon a firm's approach to NPD. Specifically, we look at the degree to which a firm applies an experimental approach that emphasizes frequent trial and error rather than thorough analysis of information in looking for the right product solution. Such an experimental approach allows more flexibility and uncertainty in the NPD process, thus affecting the integration of customers. We examine how customer involvement as co-developers in NPD may influence new product outcomes, in comparison with the traditional approach of using customers as an information source. An analysis of survey data of NPD projects finds that, while both customers-as-information-sources and customers-as-codevelopers contribute to new product performance, their effects are different depending on the degree to which an experimental NPD approach is applied. Customers-as-information-sources is more beneficial when a firm takes a highly experimental NPD approach, but customers-as-co-developers is less beneficial when a highly experimental approach is taken. The findings suggest that involving customers as co-developers may not be suitable for all firms, and firms need to consider how experimental their NPD approaches are and align their approaches of customer involvement with existing NPD practice.

2 - An Adaptive Marketing Capabilities Perspective of Open Contribution During New Product Development

Gregory Fisher, University of Illinois at Urbana-Champaign, 350 Wohlers Hall, 1206 South Sixth Street, Champaign, IL, 61820, United States of America, gregfisher29@gmail.com, William Qualls

The adaptive marketing capabilities (AMCs) of vigilant market learning, adaptive market experimentation, and open marketing are important mechanisms that firms leverage to create and commercialize innovations. This study bridges AMCs to the open innovation paradigm to delineate how open contribution, through external knowledge search and diverse external stakeholder involvement, influences new product development (NPD) outcomes. With open contribution alone, firms may search their environment for knowledge but not utilize the knowledge to create innovations. AMCs are required internal firm mechanisms for interpreting and converting the external knowledge into innovations. Our research builds a conceptual framework that hypothesizes the effects of open contribution on AMCs and innovation performance. We empirically test the hypotheses with partial least squares using primary survey data from 203 respondents and find that the ability to predict innovation outcomes is substantially improved with the addition of AMCs, offering several contributions. First, this study builds upon the importance of AMC mechanisms and empirically tests their performance consequences in NPD. Notably, MSI recently advocated understanding marketing capabilities as a research priority. Second, it improves our understanding of open contribution by revealing AMCs as mediating mechanisms that enable open contribution. Third, this research examines open contribution from an empirical perspective, which advances our knowledge of how open innovation affects performance outcomes. Finally, the insights suggest how firms can develop specific capabilities needed to implement open contribution and leverage external knowledge in NPD.

3 - How Would Success Depend on Social Media and New Product Development Process?

Basar Ozcan, Marketing PhD Student, Ozyegin University, Çekmeköy Campus, Istanbul, Turkey, basar.ozcan@ozu.edu.tr, Tolga Akcura

Social media is providing a significant platform where companies can listen to their customers, obtain their feedback and increase customer satisfaction. Some companies start to proactively integrate customer engagement into policy making using such platforms. Our aim in this research is to investigate how social media impacts new product development process and the innovation success. Our specific focus is on the use of voice of customer and word of mouth emerged from social media, on ideation, conceptualization, launch and post launch stages. For this purpose, first, we develop a field study whereby we investigate the current state using in-depth interviews carried out with marketing executives of multinational firms in FMCG. This preliminary stage provides us with a set of testable hypotheses. Following, we carried out a survey to test these hypotheses. Finally, we build an empirical model where we gather voice of customer and word of mouth data from social media and test our hypotheses. Our initial results reveal that, although VOC and WOM via Social Media are deemed important, they are not integrated into the NPD process. In general, there is wide-scale agreement on the importance of deliverable customer product experience. Still, most companies do not revise thier product strategy based on social media observations.

4 - Rewarding the Few or the Many? An Investigation of the Impact of Rewards on Open Innovation

Pinar Yildirim, Assistant Professor, University of Pennsylvania, 748 JJ Huntsman Hall, Wharton School, Philadelphia, PA, 19104, United States of America, pyild@wharton.upenn.edu, Reto Hofstetter, John Zhang

In this study, we examine the impact of financial incentives on participant retention and quality in a setting where contests are repeatedly performed. We compare three contest designs that vary with respect to the number of winners and how the total award is distributed: one winner and single award, n winners sharing an award equally, and n winners sharing the award proportional to the quality of their submitted idea. We show that how the rewards are distributed amongst the winners will affect who participates in a contest and the quality of ideas submitted. As a result, different incentive schemes can be optimal to achieve different objectives. In particular, when the total reward is sufficiently large relative to the cost of participating in a contest, the winner-takes-all incentive is best at retaining participants, but not at generating ideas of the highest average quality in an open innovation platform. When the reward is small, the highest retention rate is achieved through distributing it equally amongst the top n participants (equally shared rewards). In addition to developing theoretical findings, we use the data from crowdSPRING to test our model predictions.

5- Information Spillovers and User Behavior in Open Innovation Contests

Abrar Al-Hasan, University of Maryland, Robert H. Smith School of Business, College Park, MD, 20742, United States of America, aalhasan@rhsmith.umd.edu, Siva Viswanathan, Il-Horn Hann

Online crowdsourcing markets typically use open innovation contests to attract participants. An important aspect of open innovation contests is the increased availability of information, in particular information relating to other contestants. Participants in such open innovation contests are faced with a number of strategic choices–an important choice being the order of submission or timing of entry in a contest. While early movers enjoy some benefits and are able to deter entry of later contestants, late movers might benefit from their ability to learn from early entrants. In this study we examine how information spillovers in open innovation contests impact the entry behaviors of contestants and their likelihood of winning the contest. Using data from a leading open innovation marketplace, we find that contest design, particularly relating to information visibility, significantly influences contestant's behavior as well as contest outcomes. We find that information spillover related to submission visibility, feedback visibility, and the specificity of the feedback has significant impact on contestant behavior and their likelihood of winning the contest. In particular, contestants who leverage such information spillovers and submit later are more likely to win the contest. Our findings have interesting implications for market makers, market participants, and policy makers, as well as for the design of online innovation contests.

Thursday, 10:30am - 12:00pm

■ TB01

01- Montreux

Data-Driven Customer Relationship Management

Cluster: Internet and Interactive Marketing

Invited Session

Chair: Michael Braun, Associate Professor of Marketing, Massachusetts Institute of Technology, Sloan School of Management, 100 Main St., E62-535, Cambridge, MA, 02139, United States of America, braunm@mit.edu

1 - CLV Model using RFM Data: Acquisition Strategy and Retention Tactic with Marketing ROI

Makoto Abe, The University of Tokyo, Graduate School of Economics, Hongo, Bunkyo-ku, Tokyo, Japan, abe@e.u-tokyo.ac.jp

The wide use of RFM analysis in CRM suggests that these measures contain rather rich information about customer purchase behaviors. An individual behavior model that permits the estimation of CLV from standard RFM data in 'non-contractual' setting is developed. Using FSP data, several substantive issues are uncovered. First, correlations between purchase rate and spending can exist with the direction dependent on the data. When high purchase rate is associated with low spending, their relative magnitudes must be compared in order to assess the net impact on CLV. Second, useful insight into acquisition is gained by decomposing the impact of change in customer characteristics on CLV into three components: purchase rate, lifetime and spending. The three components can exert influences in opposite directions, thereby canceling each other to produce a collectively reduced effect as the total on CLV. The model can result in the following CRM applications. For Existing Customers: the model's outputs include various customer-specific statistics that are useful for CRM: such as purchase rate, dropout rate, and spending per trip, as well as 1-year survival rate, expected lifetime, probability of being active at the end of the observation period, expected number of future transactions, expected future spending, and CLV. The model also generates the optimal tactic in terms of Marketing ROI for retention interception, such as the amount and timing of incentive each customer should receive to prevent him/her from dropout. For Prospective Customers: by relating customer characteristics to the frequency, dropout and spending behaviors, which, in turn, are linked to CLV, the model provides useful insight into acquisition strategy based on customer demographics.

2 - Incorporating History Dependence in Models of CBA: A Generalization of the (M)BG/NBD Model

Jost Adler, Professor, University Duisburg-Essen, Mercator School of Management, Lotharstraße 65, Duisburg, Germany, jost.adler@uni-due.de

In recent years, several authors developed models for customer base analysis (CBA) in noncontractual relationships. Models like the Pareto/NBD (Schmittlein, Morrison and Colombo 1987), the BG/NBD (Fader and Hardie 2005), the MBG/NBD (Batislam, Denizel and Filiztekin 2007), and the PDO model (Jerath, Fader and Hardie 2011) uniformly assume a homogeneous Poisson purchase process on the individual level. Poisson processes are characterized by the lack of memory property, meaning that the probability distribution of purchasing at any point in time is independent of all previous purchase events. In contrast, extant research in marketing shows that customer experience significantly influences customer loyalty and the intention to rebuy. To accurately describe the (re)purchasing pattern of customers, the probability of a purchase occurring at a given time therefore must depend on the individual past purchase behavior. The present paper develops a generalized purchase probability model that accounts for this history dependence. Using an inhomogeneous Gamma process (Berman 1981) with a power law intensity function and a Gamma heterogeneity distribution, the author derives a closed form model likelihood, which includes the homogeneous Poisson process as a special case. The dropout process is assumed to follow a discrete time Geometric distribution with Beta heterogeneity. Maximum likelihood estimates of the six parameters can be obtained from individual purchase time data by employing standard optimization procedures. The empirical analysis of three different data sets demonstrates a superior performance on model fit. Moreover, the model shows a better prognostic power concerning typical metrics used by managers to characterize customer cohorts and to calculate individual CLVs.

3 - Managing Churn to Maximize Profits

Aurelie Lemmens, Tilburg University, Warandelaan 2, Tilburg, Netherlands, a.lemmens@uvt.nl, Sunil Gupta

Customer defection or churn is a widespread phenomenon that threatens firms across a variety of industries with dramatic financial consequences. To tackle this problem, companies are developing sophisticated churn management strategies. These strategies typically involve two steps:ranking customers based on their estimated propensity to churn, and then offering retention incentives to a subset of customers at the top of the churn ranking. The implicit assumption is that this process would maximize firm's profits by targeting customers who are most likely to churn. Consequently, current marketing research and practice aims to maximize the correct classification of churners and non-churners. However, profit from targeting a customer depends on not only a customer's propensity to churn, but also on her spend or value, her probability of responding to retention offers, as well as the cost of these offers. Overall profit of the firm also depends on the number of customers the firm decides to target for its retention campaign. We propose to model that accounts for all these elements. Our optimization algorithm uses stochastic gradient boosting, a state-of-the-art numerical algorithm based on stage-wise gradient descent, that also determines the optimal number of customers to target. The resulting optimal customer ranking and target size selection leads to, on average, a 138% improvement in profit compared to current methods. For a company like Verizon Wireless, this translates into a profit increase of $24 million from a single retention campaign without any additional implementation cost.

4 - The Effect of Service Quality on Customer Lifetime Value

Michael Braun, Associate Professor of Marketing, Massachusetts Institute of Technology, Sloan School of Management, 100 Main St., E62-535, Cambridge, MA, 02139, United States of America, braunm@mit.edu, David Schweidel, Eli Stein

We present a model of expected customer lifetime value (ECLV) for noncontractual settings that incorporates measures of service quality and customer experience. A customer who receives a level of service that is less that what was ordered is more likely to churn, but offering higher service quality does not reduce churn by as much. More crucially, the expected change in ECLV depends on observed recency and frequency. For customers with high or low probabilities of being "alive," information about serivce quality has little effect on posterior estimates of ECLV. These insights can help managers to measure the return on investment in service quality more accurately, and to target marketing resources appropriately. The model itself is easy to implement, and does not require simulation-based estimation methods.

■ TB02

02- Lausanne

User-Generated Content - I

Cluster: Internet and Interactive Marketing

Invited Session

Chair: Manish Tripathi, Assistant Professor, Emory University, 1300 Clifton Rd, Atlanta, GA, 30322, United States of America, manish.tripathi@emory.edu

1 - Microblogging Characteristics and Branding

Eser Aygün, Istanbul Technical University, Maslak, Istanbul, Turkey, eser.aygun@gmail.com, Tolga Akcura

Traditionally, it has been well accepted that voice of customer plays a significant role in identifying successful products, differentiating reputable, well respected brand names and increasing overall satisfaction levels. Increasingly, prevalence of digital platforms and social media shifts the marketers' focus to customer identification, interaction and integration. Focusing on microblogs, the research questions of this study are as follows: How would the post characteristics (words, sentiments, frequency) relate to demographic profiles? Would frequency of interaction and recency interact with sentiments? Can we argue that certain demographic profiles and post characteristics play a more beneficial role on sentiments and a brand's value? We use a unique rich dataset that includes 685077 tweets originating from 120464 ids and covering 62 brands focused on one sector. From an external offline data source, we also have demographic data such as gender and education. We build a novel model to capture brand sentiments and relate this to a brand's value. Our preliminary results show the intricate relationships amongst these variables and a brand's value.

2 - A Diffusion Model of Microblogging and Branding

Tolga Akcura, Ozyegin University, Alemdag, Istanbul, Turkey, akcura@yahoo.com

There are increasing number people who write blogs and participate in social media. According to the latest statistics, nearly one third of the Internet users already participate in microblogging and use services from twitter.com. Already, many firms start to capitalize on discussion themes by selling advertisements. Consequently, the use of keywords emerge as an important consideration for the managers. In this research, we propose a model to capture the microblogging behavior of individuals. The people who tweet can be represented as members of a network who interact with each other and be influenced by the themes in the society. Accordingly, as the members of the network are stimulated and adopt a discussion, they are further influenced by the mutual interactions in the network. The model we propose acknowledges both societal (exogeneous) forces and network related mutual interactions within a diffusion mechanism. The diffusion in our model is based on an individual level stochastic Bass framework. We collect our own data and benefit from a generous grant provided by Tubitak (National Science Foundation of Turkey). The estimation results show that our model suits well to model the microblogging behavior.

3 - Effects of Peer Opinions and Customer Opinions on Critic Evaluations of Cultural Products

Xia Liu, Tsinghua University, School of Economics and Management, Tsinghua Road, Haidian District, Beijing, China, liux@sem.tsinghua.edu.cn, Peter Golder, Jun Pang

Critic opinions play a key role in the success of cultural industries. Customers rely on critic opinions to infer product quality that is difficult to evaluate prior to consumption. An implicit assumption behind this reliance is that, being the "ideal-type" of market actors, professional critics are free to evaluate products on the basis of merit and their opinions are supposed to be resistant to all forms of influence from both producers and ordinary customers. This assumption, despite being critical to the authenticity of critic opinions and thus the market power of critics, has not been corroborated. To fill this void, the present research aims to understand the social influences on critic opinions during the diffusion process of cultural products. Using data from the U.S. movie industry, we investigate how critic reviews are influenced by previously published peer reviews and customer reviews. In addition, we compare these effects for critic reviews that are published on entertainment-specialized media versus generalized media. The results show that critic reviews are influenced by both peer reviews and customer reviews. Moreover, the influence of peer reviews is more salient for generalized media while the influence of previous customer reviews is more pronounced for specialized media. These finding suggest that contrary to the independence assumption, professional critics are not making independent voices; rather, they conform to the opinions of their peers and even ordinary consumers, and construct product evaluations based on a complicated social process. We further discuss the managerial implications of these findings.

4 - A Comprehensive Model of Brand-Generated and Consumer-Generated Communications

Manish Tripathi, Assistant Professor, Emory University, 1300 Clifton Rd, Atlanta, GA, 30322, United States of America, manish.tripathi@emory.edu, Douglas Bowman

Firms are increasingly collecting a plethora of data from a myriad of sources that describe the communication between customers and the firm. This research applies appropriate methods, such as Bayesian VAR and hierarchical models to manifest insights obtained from fusing these types of data. Additionally, the researchers apply these methods to analyze multiple product categories, resulting in insights across categories. The data examined describe: (1) what brands are doing in the marketplace (advertising effort and messaging; product additions, deletions, enhancements; pricing and promotion; distribution; firm Facebook messaging); (2) what consumers are saying and sensing (consumer-generated social media content; website traffic; customer-initiated contacts with firms); and (3) performance outcomes measures. Questions examined include: How do themes expressed by brand-generated content manifest themselves in consumer-generated contents? What types of consumer-generated content are leading/lagging indicators for consumer purchase behavior? To what extent is there a mediating, synergistic, or substitute relationship between consumer-generated content and consumer-initiated contacts? The researchers find several insights that seem to hold across product categories.

■ TB03

03- Bern

e-Marketing Potpourri

Cluster: Internet and Interactive Marketing

Invited Session

Chair: Umut Konus, Assistant Professor, Eindhoven University of Technology, Den Dolech 2, Connector 0.10, Eindhoven, 5600MB, Netherlands, u.konus@tue.nl

1 - Customer Co-Creation in Health Care Services: The Development of a Scale to Measure Cure and Care

Sarah Van Oerle, PhD Researcher, University of Antwerp, Prinsstraat 13, Antwerp, 2000, Belgium, sarah.vanoerle@ua.ac.be, Annouk Lievens, Dominik Mahr

Today, health care customers take an active role in their disease management, thereby using ICT to access medical information and to connect with peers via online support communities. Previous research in a health care context, identified two broad categories that are critical to address the patient's support need holistically: cure (i.e. cognitive) and care (i.e. affective) oriented support. Further insights in, and measurement of these independent, partially contrary dimensions is vital to advance research. Therefore, the aim of this research is to develop a social support scale for online communication, thereby confronting a marketing and a text mining approach. Research in this new, interactive online context introduces several challenges for marketing researchers. First of all, the confrontation with very extensive datasets introduces issues for capturing and storing (i.e., "big data"). Secondly, initial attempts for measurement in an online context are based on classification and coding of data which involves trade-offs between symbolic richness and construct clarity. Therefore, we will confront the marketing approach for scale development with a text mining approach (i.e., automatically extract information from unstructured texts). Marketing research predominantly uses an explanatory routine, while in text mining predictive analytics are commonly used for theoretical advances. Therefore, the aim of the current research is three-fold. First of all, in terms of theory-building we get a more profound insight in the underlying sub-dimensions of cure and care related support. Secondly, we develop a scale to assess the cure and care related outcomes in online forums. Thirdly, we draw conclusions regarding the gap between explanatory and predictive analysis.

2 - Methods for Simulation, Optimization and Digital Attribution of Cross-Media Marketing Spend

Mert Bay, MarketShare, Santa Monica, CA, United States of America, mbay@marketshare.com

Marketers need to measure performance of each of their marketing spend, simulate scenarios and optimize their marketing budgets according to their business objectives. At MarketShare, we develop cross-media predictive models that enable variety of businesses to simulate & optimize their marketing budgets and attribute revenue to different advertising touch points both online and offline. In this talk, we are going to give a brief overview of our efficient methods for these large-scale simulation and optimization of our predictive models. In particular, we will describe in more detail our approach to digital attribution problem where we uncover the impact of individual touch points across time on the business.

3 - Consumer Impatience and Market Structure: The Case of Online Pizza Delivery

Elisa Montaguti, Associate Professor, University of Bologna, via Capo di Lucca 34, Bologna, 40033, Italy, elisa.montaguti@unibo.it, Federico Rossi, Sara Valentini

Consumer impatience, i.e. a high discount rate of future, implies that consumers desire to acquire money or other goods very quickly. Research on consumers' perceptions of the time value of money abounds. However, hardly any paper has looked at the effect of consumer impatience on competition. In this research we study how impatience for food consumption affects firms' entry. Using a unique dataset of online orders of delivery pizza, we show that people significantly constrain their decision set in favor of pizzerias that are very local. A number of exogenous shocks allow us to distinguish their preference for pizzerias from their preference for quick food. We find that the impatience for online delivery leads to a large number of pizzerias which would otherwise never enter the market.

4 - Multi-Touchpoint Segments in Relational Contexts: A Real-Time Experience Tracking Approach

Umut Konus, Assistant Professor, Eindhoven University of Technology, Den Dolech 2, Connector 0.10, Eindhoven, 5600MB, Netherlands, u.konus@tue.nl, Emma Macdonald, Hugh Wilson

One of the challenges from channel proliferation is to understand how customers can be segmented on the basis of their multiple touchpoint encounters with the firm. Previous work demonstrates the existence of multichannel segments, but is limited by focusing on certain channels, ignoring the role of mass media and other communication channels in customer shopping-journey in a multichannel environment. Furthermore, previous research relied on transactional data based on purchase and after sales service use, or alternatively recall through cross-sectional surveys. We apply the novel real-time experience tracking approach to address these limitations. 458 customers reported, via a structured text (SMS) message, whenever they encountered their main current brand in each of four categories (banking, healthcare, telecommunications and soft drinks) over four weeks, providing data on around 7,000 brand encounters. The resultant data enable a variety of touchpoints to be treated equally, from mass media (newspapers, TV, billboards) to interactive channels (online and in-store) in addition to word-of-mouth encounters. Using latent class analysis based on multi-touchpoint brand encounters as indicators, segments are presented within each category. Covariates of segment membership include innovativeness, shopping enjoyment, price consciousness and time pressure. This real-time data collection approach and segmentation may help managers to allocate resources across the complete marketing plan.

■ TB04

04- Monch

Bayesian Methods in Marketing

Cluster: Special Sessions

Invited Session

Chair: Refik Soyer, Professor, George Washington University, Washington, DC, United States of America, soyer@gwu.edu

1 - Studying Cross Category Effects of Promotions using Bayesian Networks

Srinivas Prasad, George Washington University, Washington, DC, United States of America, prasad@gwu.edu

We propose the use of Bayesian Networks to study the cross category effects of promotions using market basket data. Given a set of product categories and market basket data, Bayesian networks are learned from the data and are used to identify the underlying dependencies across product categories that result from promotions. The objective in building Bayesian networks is to identify clusters of categories wherein the cross category effects are limited to categories within a cluster. Such dependency structures would then help in making predictions on category based basket choices given a set of specific marketing mix activities. We employ an IRI market basket data set in our study that contains transactions including 22 categories over 2 years for 500 panelists. We discuss how the results from our analysis can be used to optimize promotion decisions.

2 - The Drivers of Product Modification Cycles: A Bayesian Approach

Tevfik Aktekin, Assistant Professor of Decision Sciences, University of New Hampshire, 10 Garrison Ave, Durham, NH, 03824, United States of America, Tevfik.Aktekin@unh.edu, Goksel Yalcinkaya, Sengun Yeniyurt

As markets mature, value adding product modifications inevitably become the central piece of product strategy for firms. This study explores the factors that influence the decision to launch a product modification strategy using duration models in the context of the U.S. automotive industry. In doing so, we propose Bayesian generalized Gamma family and mixture family models that are capable of handling non-standard modification behavior and censoring with time varying covariates and consider their estimation using Markov chain Monte Carlo methods. The findings imply that there are three latent modification groups, the modification rates are non-monotonic and the product modification decisions/strategies are influenced by factors such as the total number of cars in the industry/brand, the total number of major modifications in the industry/brand. Furthermore, our results also indicate that the overall auto industry market behaves more homogeneously as there are more major modifications and less number of cars in the industry. Additionally, we also found that the number of minor modifications in the market do not have any significant effects on the major modification strategy.

3 - A Dynamic Bayesian Network Approach to Market Basket Analysis

Bumsoo Kim, George Washington University, Washington, DC, United States of America, bk4498@gwu.edu

In this study, we consider utilizing DBN's to model different market basket problems. We propose approaches for learning and inference objectives, for both model parameters of a given structure and the dynamics of the structure itself. We use MCMC methods and use results from the DBN literature to devise learning algorithms in a time-series market basket data setting. We illustrate the implementation of proposed approach with low-dimensional problems and discuss their applications.

4 - Semi-Parametric Bayesian Models for Call Center Demand

Refik Soyer, Professor, George Washington University, Washington, DC, United States of America, soyer@gwu.edu, Francesca Ieva, Murat Tarimcilar

In this paper, we propose semi-parametric Bayesian proportional intensity models to analyze arrival data to call centers. These models allow for consideration of both covariate and time effects on the call volume intensity, and in so doing, enables us to assess the effectiveness of different advertising strategies along with predicting the arrival patterns. Furthermore, the nonparametric nature of the intensity function provides flexibility in describing various arrival patterns. We develop a Bayesian analysis of the model and discuss how the model can be used potential heterogeneity in arrival patterns. The proposed model and the methodology are implemented using real call center arrival data.

■ TB05

05- Montblanc

Marketing and Performance II

Contributed Session

Chair: Xiaoyun Chen, Assistant Professor, University of Macau, Macau, xychen@umac.mo

1 - Exploring the Different Incarnations of Market Orientation in Contemporary Business Models

Mikko Laukkanen, Researcher, Aalto University School of Business, P.O. Box 21230, FI-00076, Helsinki, 00100, Finland, mikko.laukkanen@aalto.fi, Johanna Frösén, Esa Saarelainen

A firm's business model defines how the firm creates and delivers value to customers, and converts this value into profits. Essentially, the business model depicts the content (i.e. what is being exchanged), structure (i.e. parties involved), and governance (i.e. the forms of control over the process) of transactions designed to create value. Market orientation refers to an organization-wide generation of market intelligence, dissemination of this intelligence across departments, and responsiveness to it, or the organization culture that creates the necessary behaviors for creation of superior value for customers and superior performance for the business. In bringing these two concepts together, this paper aims to enrich the discussion on business models by adding a new level of analysis, and to make more concrete the discussion on market orientation by linking it to the practical elements in the business model concept. Relying on 20 semi-structured interviews among business executives, we uncover how market orientation appears on the three dimensions of a business model in different types of firms. The findings of the study reveal that the different incarnations of market orientation in the firms' business models vary across a continuum, ranging from a formal market orientation reflected in a firm's processes and structures, to an informal, cultural market orientation reflecting shared values highlighting customer value as a central goal among the members of the organization. Furthermore, market orientation is found to be tightly bound to all three dimensions of a business model. By bringing together the concepts of business models and customer orientation, our study provides new tools for analyzing the firm's ability to create and appropriate value.

2 - Too Much of a Good Thing: How Does Good Reputation Affect a Firm's Market Value?

M. Berk Talay, University of Massachusetts Lowell, One University Avenue, Lowell, MA, 01854, United States of America, berk_talay@uml.edu, M. Billur Akdeniz

Examining prospective stock market returns on marketing actions has become a very popular research stream among marketing scholars in the last decade. As such, a myriad of studies have been published focusing on the links between a wide variety of marketing actions including celebrity endorsements, new product preannouncements, sales promotions and firm value. Our research advances this relatively nascent body of literature by zeroing in on the moderating effects of reputation on this link. Specifically, drawing on expectancy violation and institutional perspectives, this study posits that reputation of a firm can significantly affect investors' perceptions about a specific firm engaging in a marketing action, which could, in turn, lead to biased stock market reactions. Results from a multi-industry and method analyses show that both high and low levels of reputation lead to bias, albeit with different directions; such that high-reputation firms enjoy higher-than-expected stock market reactions, whereas low-reputation firms get much less reaction to their marketing actions than one would expect.

3 - When Does Distribution Defy Scale? An Examination of Retail, Wholesale and the Performance Ditch

Can Uslay, Assistant Professor of SCM and Marketing Sciences, Rutgers Business School, 94 Rockafeller Road, Piscataway, NJ, 08854, United States of America, can.uslay@business.rutgers.edu, Ayca Altintig, Ekaterina Karniouchina

One of the fundamental axioms of corporate strategy, Porter's (1980) generic strategy argument suggests that firms that are 'stuck-in-the-middle' perform significantly worse than those committed to a low-cost or differentiation strategy. The dictum has been among the reigning take-aways from the business schools since the eighties. However, the stuck-in-the-middle argument is really an empirical question (e.g., Dess and Davis 1984; Kim and Lim 1988) and there is yet no consensus on its validity. A meta-analysis of the extant literature found no support for it (Campbell-Hunt 2000), and there are several studies that contradict Porter (1980, 1985) and report that firms following dual strategies actually outperform others (e.g., Pertusa-Ortega, Molina-Azorin, and Claver-Cortes 2009; Spanos, Zaralis, and Lioukas 2004; White 1986). Extending the recent effort by Uslay, Altintig, and Winsor (2010), we use a large longitudinal sample that consists of both US public and private firms over four decades and examine the stuck-in-the-middle proposition by focusing on the wholesale and retail sectors. Our findings provide overwhelmingly supportive evidence for Porter (1980). Firms that find themselves stuck-in-the-middle experience statistically and financially significant disadvantages that persist across the distribution channels and over decades. We also find that specialty retailer and wholesalers' financial performance does not follow the diminishing market share function implied by extant theory. We specify the conditions under which the channel members get stuck-in-the-middle and we use industrial organization and marketing insights to augment theory and provide managerial implications.

4 - When Does Imbalance between Exploration and Exploitation Enhance Performance? A Contingency View

Xiaoyun Chen, Assistant Professor, University of Macau, Macau, xychen@umac.mo, Jie Wu, May Wang

The literature on whether and how an organization can reconcile explorative and exploitative learning generally suggests a balanced approach (also called organizational ambidexterity or duality) constitutes a prerequisite for organizational survival and success (March, 1991; He and Wong, 2004). Yet some researchers point out the potential liabilities of ambidexterity and highlight the need to take an imbalanced approach (or specialization) between two learning strategies by focusing on either exploration or exploitation (Gupta et al., 2006). The underlying logic is that exploration and exploitation are potentially incompatible learning strategies that require radically different competencies and compete for scarce organizational resources. Following this logic, scholars have recently suggested that firms should specialize in either exploration or exploitation without jeopardizing their long-run performance. However, evidence in support of the effect of specialization on performance is scant. This study examines when high tech firms are better off specializing in either exploration or exploitation. Drawing on the organizational learning literature, we hypothesize that a firm's imbalance between exploration and exploitation (or specialization strategy) has differential impacts on firm performance depending on its structural characteristics and external environment. A survey data of 180 high tech firms in China shows that firm age and scarcity of R&D resources moderate the relationship between specialization and performance. Moreover, specialization strategy works better when competitive intensity is low. These findings have theoretical implications for the research on organizational ambidexterity and practical implications for managers of small and medium-sized business.

■ TB06

06- Monterosa 1

Branding and Firm Performance

Cluster: Special Sessions

Invited Session

Chair: Xueming Luo, Professor, University of Texas at Arlington, 701 S Nedderman Dr, Arlington, TX, 76019, United States of America, luoxm@uta.edu

1 - The Impact of Brand Rating Dispersion on Firm Value

Xueming Luo, Professor, University of Texas at Arlington, 701 S Nedderman Dr, Arlington, TX, 76019, United States of America, luoxm@uta.edu, Sasha Raithel, Michael Wiles

This study examines brand dispersion–variance in brand ratings across consumers–and its role in the translation of brand assets into firm value. Dispersion captures the covert heterogeneity in evaluations of brands among consumers who like or dislike the brands, which would affect an investor's decision to buy or sell a stock. The higher the dispersion, the more inconsistent and polarized cross-consumer ratings of the brands. Multiple analyses–from simple, model-free to time-series models–on 730,818 brand-day observations provide robust evidence that changes in brand dispersion matter for stock prices. Brand dispersion has Januslike effects: it harms returns but reduces firm risk. Further, downside dispersion has a stronger impact on abnormal returns than upside dispersion, indicating an asymmetry in brand dispersion's effects. Moreover, dispersion tempers the risk-reduction benefits of brand magnitude in both short and long runs. Without modeling dispersion, brand magnitude's impact on firm value can be over- or under-estimated. Managers should consider dispersion a vital brand-management metric and add this metric to the brand-performance dashboard.

2 - Corporate Social Performance, Brand Equity and Shareholder Value

Saurabh Mishra, McGill University, Montreal, QC, Canada, saurabh.mishra@mcgill.ca, Sachin B. Modi

Extant research in marketing has investigated the influence of brand equity and corporate social performance (CSP) on firm financial performance independently. However, insights from literature in consumer psychology indicate pathways linking CSP to brand equity of firms. In this research the authors build on these insights to develop a framework evaluating the chain-of-effects between CSP, brand equity, and firm shareholder value. Results based on analysis of longitudinal data collected from multiple secondary sources confirm the theoretical framework and provide novel implications.

3 - Brand Analysis and Strategy from Online Chatter

Seshadri Tirunillai, University of Houston, Houston, TX, United States of America, seshadri@bauer.uh.edu, Gerald J. Tellis

The quality of a brand is one of the most important drivers of consumer satisfaction, competition, and the long term success of the brand. Identifying the right dimensions of quality is central to determining market segmentation, brand positioning, brand ranking, creating brand copy, improving current brands, or designing new brands. Online User-Generated Content (Chatter), such as product reviews, constitutes an excellent emerging source for identifying dimensions of quality at a very high frequency. This study proposes a unified framework for automatically parsing from UGC the latent dimensions of quality and ascertaining the valence, labels, validity, importance, dynamics, and heterogeneity of those dimensions using Latent Dirichlet Allocation (LDA). Our sample of UGC consists of rich data on product reviews across fifteen firms in five markets, over four years. The results suggest that a few dimensions are enough to capture quality of brands. These dimensions have good face, external and predictive validity. Dynamic analysis enables tracking the importance of dimensions over time. It also allows for tracking of competitive brand positions on those dimensions over time.

4 - Disclosure of Advertising Expenditure: An Indicator of Business Strategy

Leigh McAlister, University of Texas-Austin, Austin, TX, United States of America, leigh.mcalister@mccombs.utexas.edu, Niket Jindal, Albert A. Cannella, Jr., Raji Srinivasan

Two strategies–differentiation and cost leadership–have been offered as the routes to achieve competitive advantage. A differentiation strategy creates superior and distinctive products and a cost leadership strategy seeks to achieve the lowest costs in its industry. Given superior and distinctive products, a firm with a differentiation strategy is likely to believe advertising to be key to its performance. Accounting standards imply that a firm holding such a belief is obligated to break advertising expenditure out of SG&A, which leads us to propose that a firm that breaks out advertising is likely to have a differentiation strategy. Using multiple data sources and different empirical methods, we provide evidence that breaking out advertising expenditure is a reliable and valid indicator of a firm's business strategy. Using a broad sample and secondary data, the indicator's nomological validity is demonstrated by confirming important theoretical and small-sample, survey-based findings (no strategy-driven difference in profitability; differentiation strategy drives faster sales growth, higher firm value and marketing representation on top management team). Using the indicator thus shown to be reliable and valid, we exploit a regulation change to demonstrate that a differentiation strategy's growth rate and firm value advantages arise because the firm is constituted in such a way that it views advertising as key to performance, not simply because the firm advertises.

■ TB07

07- Monterosa 2

Two-Sided Markets

Contributed Session

Chair: Masakazu Ishihara, Assistant Professor of Marketing, New York University, Stern School of Business, 40 West 4th St., New York, NY, 10012, United States of America, mishihar@stern.nyu.edu

1 - Charging for Ad Impact on Viewer Experience: Marketplace Dynamics and Pareto Efficiency

Valeria Montero, University of Pennsylvania, 3730 Walnut Street, Suite 700, Philadelphia, PA, 19104, United States of America, valeriam@wharton.upenn.edu, Eric Bax

Media platforms that show obtrusive display ads risk reducing viewer engagement, which eventually harms their business. However, ad features that negatively impact viewer experience can be effective for some advertisers. Since platforms compete for advertiser dollars, any solution to ad obtrusiveness must not harm advertisers as a class. Can a platform reduce ad obtrusiveness while also benefiting its advertisers? We examine an auction mechanism that selects online display advertisements based upon ad impact on viewer experience in addition to bids. We use a mathematical model to show that the mechanism can simultaneously benefit advertisers, viewers, and the platform. We also find that platforms with thicker ad markets have more latitude to select ads based on ad impact on viewer experience while still improving advertiser profits. Our results provide guidelines for developing an 'ad impact score' for ad creatives by using the correlation between measures for the effectiveness and impact on viewer experience of ad features.

2 - Content Quality in Media Markets

Taylan Yalcin, Assistant Professor, Chapman University, One University Drive, Orange, CA, 92866, United States of America, yalcin@chapman.edu, Elie Ofek, David Godes

This paper investigates content quality decisions given by media firms that operate in two-sided markets. Media firms compete in the content market for consumers and in the interrelated advertising market for advertisers. It is known that a media firm has a greater incentive to increase content sales, because doing so will generate more revenues from both markets. Previous literature identifies under-pricing as a tool for boosting demand. We add another strategic tool, increasing content quality-over-investing. Furthermore if the increase in quality is substantial, it may be optimal to charge a higher price as demand will still stay strong. Thus over-investing brings a counter force to the tendency to under-price. The net effect of these two forces on price critically depends on the costs associated with quality improvement.

3 - Daily Deal Websites in Markets with Asymmetric Information

Tansev Geylani, Associate Professor, University of Pittsburgh, Katz School of Business, Pittsburgh, PA, 15238, United States of America, tgeylani@katz.pitt.edu, Mark Bender, Esther Gal-Or

Daily deal websites act as advertising intermediaries by selling vendors' deals to consumers. We investigate whether these intermediaries can segment each side of the market. While one intermediary can potentially match high quality vendors with high willingness to pay consumers the other can match the opposite profiles of vendors and consumers. We characterize two different patterns of the segmenting equilibrium depending on the size of the segment of consumers who use the daily deal websites for the purpose of acquiring information. However, there is a long range of parameter values for which segmentation fails altogether resulting in fierce Bertrand competition.

4 - Two Sided Piracy

Masakazu Ishihara, Assistant Professor of Marketing, New York University, Stern School of Business, 40 West 4th St., New York, NY, 10012, United States of America, mishihar@stern.nyu.edu, Eitan Muller

This paper theoretically examines platform providers' incentive to engage in software piracy protection activities. In two-sided software markets such as video games and e-books, a platform provider might gain from piracy because it potentially increases the value of the platform to consumers who are likely to use pirated software. To gain insights about platform providers' piracy protection activities, we collect data from the U.S. handheld video game market between 2004 and 2011. During the sample period, (i) Nintendo's Nintendo DS (NDS) and Sony's PlayStation Portable (PSP) were the two dominant handheld platforms, (ii) both firms were also software providers for their own platforms (in-house software), and (iii) software piracy was active on both platforms. The data reveal a seemingly counter-intuitive behavior by Nintendo and Sony. Nintendo invested in piracy protection much less than Sony did, despite the fact that the sales of in-house software accounted for a larger proportion of the entire revenue for Nintendo than for Sony. To understand their different policies on piracy protection, we develop a formal economic model that integrates in house and outsourced software. Our analysis provides the conditions under which platform providers benefit from piracy, and sheds light on the profit-implication of software piracy for platform providers.

■ TB08

08- Edelweiss

TARIFFS

Contributed Session

Chair: Christian Schlereth, Goethe University, Frankfurt, Grueneburgplatz 1, Frankfurt, Germany, schlereth@wiwi.uni-frankfurt.de

1 - Bundling Consumers: A Strategic Rationale for Family Plans

Debu Purohit, Professor, Duke University, Fuqua School of Business, 1 Towerview Drive, Durham, NC, 27708, United States of America, purohit@duke.edu, Preyas Desai, Bobby Zhou

In the telecom market, we observe that firms often give consumers an option to purchase an individual plan or a family plan. While an individual plan gives a certain allowance of usage (e.g., minutes, data, etc.) for a single consumer, a family plan allows multiple consumers to share a specific level of usage. The theoretical issue is to understand how the firm stands to benefit from allowing family plans? In this paper, we use a game theoretic framework to explore the role of family plans. One way that family plans can be profitable is that they allow the firms to draw in very low valuation consumers whom the firm would choose not to serve in the absence of a family plan. Interestingly, we find that even when a family plan does not draw any new consumers into the market, a firm can still benefit from offering the family plan. This occurs principally because the family plan allows high- and low-valuation consumers to 'bundle' themselves.

2 - Play it Save: Consumer Choice under Four-Part Tariffs with Cost Caps

Philip Koehler, Karlsruhe Institute of Technology, Englerstr. 14, Karlsruhe, 76131, Germany, philip.koehler@kit.edu, Jan Kraemer

With the ongoing trend towards a service oriented economy, the need for innovative pricing schemes becomes increasingly important. We study the impact of nonlinear four-part tariffs that are formed by a cost cap component over and beyond the traditional tariff components fixed fee, consumption price and consumption allowance. The cost cap component fixes an upper cost limit, like flat rates, but, unlike flat rates, also allows for lower costs in case the cost limit is not reached. Cost caps have recently been introduced for telecommunication services, but were also used earlier as deductibles in insurances contracts or as maximum day rates for rental services. We investigate the impact of a cost cap component on consumer choice and its pricing implications for service providers. To this end, a utility model is developed that predicts the optimal consumption pattern under four-part tariffs. Thereby, consumers' uncertainty in consumption, as well as bounded rationality are taken into account. The model's performance is evaluated and compared to alternative approaches using a conjoint choice experiment. A representative sample of 1,000 German users of mobile telecommunications services was recruited in order to estimate consumer preferences using a mixed logit hierarchical Bayes approach. Based on the estimated preferences, the impact of four-part tariffs on providers' profits is further analyzed by simulated annealing. The results indicate that four-part tariffs can increase providers' profits even further than what is possible by the use of three-part tariffs. We also find that the cost cap component performs weakly better than the allowance component in its ability to extract consumers' additional willingness to pay induced by their uncertainty in consumption.

3 - Profit Maximising Contract Plans

Christian Schlereth, Goethe University Frankfurt, Grueneburgplatz 1, Frankfurt, Germany, schlereth@wiwi.uni-frankfurt.de, Siham El Kihal

Providers of many industries, such as cloud computing services, commonly offer contract plans (e.g., subscriptions) with different contract lengths as an alternative to single period plans. Contract plans are attractive for consumers who use the service periodically because the consumers benefit from significant price discounts if they commit themselves to the service provider for the time of the contract length. However, deciding on price discounts and contract lengths for contract plans is challenging, as binding consumers leads to greater profit, while offering greater price discounts negatively impacts the provider's profit. The goal of this study is to outline the factors that drive the differences in profitability when offering a contract plan in addition to a single period plan. Therefore, we model consumers' decision-making process between the two plans and develop a method to maximise the profitability of these plans. The proposed model separates the consumers' ex-ante probability of needing the service, which is assumed to be independent from the price of the contract plan, from the decreasing marginal utility that arises through the discounted benefits of future usage. In a Monte Carlo simulation, we show that offering a contract plan in addition to a single period plan increases profits by up to 10%.

■ TB09

09- Mimosa

Event Marketing and Sport Sponsoring

Contributed Session

Chair: Vijay Viswanathan, Northwestern University, 1870 Campus Dr, Evanston, IL, 60208, United States of America, vijay-viswanathan@northwestern.edu

1 - Sponsorship vs. Ambush Marketing - A Field-Experimental Comparison of Communication Effectiveness

Regina-Viola Frey, Assistant Professor, German Graduate School, Bildungscampus 2, Heilbronn, 74076, Germany, regina-viola.frey@ggs.de, Dirk Zupancic, Markus Schwarzer, Marion Büttgen

Monitoring sponsorship effectiveness is gaining more and more importance since firms are increasingly taking advantage of supporting large sports events, cultural institutions and events as well as charitable causes as means of marketing communication. However, especially in the field of sports sponsoring, traditional sponsorship is becoming increasingly threatened by creative ambush marketers seeking to position themselves as official sponsors without, however, paying license fees. As ambush campaigns are increasingly operating in a legal grey area, our studies in the context of the UEFA European Football Championship of 2012 and the FIFA Women's World Cup in Football in 2011 aim at analyzing whether official event sponsors perform superior than ambush marketers and national team sponsors in terms of market success. Data from our field experiments compare print advertisements and TV commercial in terms of consumer's notion of sponsorship and ambush marketers. The results suggest that consumers cannot identify ambusher marketers, event and team sponsors correctly and that team sponsors perform superior in terms of attitude towards the brand and customer-based brand equity. We additionally find moderated effects of humor in advertisements and fit of sponsor and event.

2 - Does Winning Lead to Cross Promotion?

Doug J. Chung, Assistant Professor of Business Administration, Harvard Business School, Morgan Hall 161, Soldiers Field, Boston, MA, 02163, United States of America, dchung@hbs.edu

Intercollegiate athletics have become a multi-billion dollar industry over the past several decades. In this study, I measure the effect that athletic success has on revenues generated by an academic institution of higher education through its athletics programs. I find that football success has a significant impact on school revenue. In contrast, the effect of basketball success is less coherent. But surprisingly, football success has a significant cross-sports impact on basketball revenue. I find that with each additional win in football, a school generates approximately two percent more in revenue by its football program. Furthermore, I find that past athletic success carries over extensively to the present, suggesting the significance of the long-term monetary effect of athletic success to many academic institutions.

3 - The Long-Term Effectiveness of Superbowl Advertising

Vijay Viswanathan, Northwestern University, 1870 Campus Dr, Evanston, IL, 60208, United States of America, vijay-viswanathan@northwestern.edu

The Superbowl is an important event in American culture. It is an event which draws millions of Americans to television sets in living rooms and sports bars. Television advertising during the Superbowl has for long captured the interest of marketers and individuals alike. ESPN reports that firms spent an average of $3.5 million for 30-second spot to capture tens of millions of eyeballs. The advent of social media has made it possible for advertisers to capture the effectiveness of their Superbowl commercials in a more effective manner than before. This study uses a sample of automobile brands that advertised during the 2012 Superbowl and examines the long-term effectiveness of advertising on buzz created through social media. Preliminary results suggest that advertising has a persistent effect on both, the volume and positive sentiment towards the brand. The result has important implications for marketers who seek to understand the long-term effectiveness of such advertising efforts.

■ TB10

10- EMBA 1

Brand Strategy

Contributed Session

Chair: Valentyna Melnyk, Associate Professor, Massey University, CJM, Private Bag 1029904, North Shore, Auckland, New Zealand, v.melnyk@massey.ac.nz

1 - An Assortment-Centric Approach to Manage Brands under Competitive Set Variation

Piyush Kumar, University of Georgia, Brooks Hall, Marketing Dept., Athens, GA, 30602, United States of America, pkumar@uga.edu, Mayukh Dass

Given an upsurge in retailers' emphasis on the efficiency of their product portfolios, brand managers face increasing variation in the composition of the brand assortments they compete against across the various points of sale. The increased variability in assortment composition raises new questions regarding the definition of a competitor, the brand's susceptibility to the point-of-sale marketing activity of rivals, and the effectiveness of the brand's own marketing mix instruments. In this paper, we propose that the marketing planning process can be made efficient by conceptualizing competition as a unified assortment and understanding the patterns in a brand's susceptibility to alternative assortment configurations and the marketing mix activities of the brand and its rival assortments. We suggest that alternative assortment configurations to which a brand exhibits similar levels of susceptibility or vulnerability can be systematically grouped together, within which there may be relatively little need for variation in the intensity of the brand'marketing activity. We use a mixture-type model on store-level transactions data to discover these assortment-centric vulnerability clusters and show that they vary substantially across brands even within the same product category. We also find wide variation across brands in their susceptibility to the marketing mix activity of their rivals as well as in the most appropriate instruments to defend their share. Our paper concludes by providing guidance for marketers regarding how to use information on brand vulnerability to systematically adjust their marketing efforts across alternative assortment configurations.

2 - Co-Creation in Corporate Rebranding

Polina Landgraf, Saint-Petersburg State University, Graduate School of Management, Nastavnikov, 5-3-180, Saint-Petersburg, Russia, polina.landgraf@gmail.com

The paper explores co-creation within corporate rebranding. Being extensively used by practitioners, corporate rebranding was scarcely studied by academic researchers. Yet, few existing contributions (Daly, Moloney, 2004; Muzellec, Lambkin, 2006; Kaikati, 2003; Merrilees, Miller, 2008) target corporate rebranding from functionalist perspective, conceptualizing it as an organizational tool, created, implemented and controlled by management. However, there is increasing understanding that firms are losing control over their brands as corporate brands are co-created with stakeholders (Gregory, 2007; Juntunen, 2012). To author's knowledge, there was no attempt to investigate how co-creation occurs in corporate rebranding. Thus, the paper addresses this gap in literature by trying to identify what groups of stakeholders participate in rebranding co-creation, to what extent they are involved in co-creation process, and in what stages of corporate rebranding process do they involve. This study will employ multiple case study approach.

3 - Brand Consistency in Consumer Packaged Goods

Harry Antonio, Emory University, 1300 Clifton Rd, Atlanta, GA, 30322, United States of America, harry.antonio@emory.edu, Douglas Bowman

Brand consistency refers to the degree of congruence among all aspects of a brand and surrounding marketing activities. Past research on brand consistency has largely been in the context of laboratory studies in evaluating brand extensions, or limited to consideration of a single focal category; there is little work examining its effects in field studies across the entire deployment of a brand, especially linking it to a brand's product market performance. An important aspect of consistency is how a brand is deployed across categories. In this paper, a brand is asserted to have degrees of consistency in regard to the categories in which it competes, and its marketing practices in relation to the norms of those categories. The importance of consistency in a brand's deployment across categories is developed by considering the functions of a brand and by drawing on principles from the brand extension literature. Household scanner panel data is used to test hypotheses relating consistency in brand deployment to market share.

4 - Effectiveness of Different Brand Positioning Strategies across the World

Valentyna Melnyk, Associate Professor, Massey University, CJM, Private Bag 1029904, North Shore, Auckland, New Zealand, v.melnyk@massey.ac.nz, Yvonne van Everdingen, Ralf van der Lans

Brand positioning boils down to a battle for the minds of target customers; it demands a value proposition with a clear statement of why the target segment should buy the product. These unique selling propositions (USP's)–such as best quality, best selling, fastest growing brand, or unique–emphasize a particular benefit of the brand that the company wants to highlight, and generally are communicated through advertising tag lines. The choice for a USP generally depends on what the consumers want, what your competitors emphasize, and what your own brand does well. This study provides insight into how consumers across countries differ in their response to different positioning strategies across different product categories. We use a unique data set involving 19,415 respondents across 25 countries and seven product categories. This global data set enables us to investigate receptivity to 4 commonly used selling propositions across many different individuals and countries, and across product categories. We estimated two different models: (1) a model where we allow for product category specific effects, i.e., the model parameters differ across product categories, and (2) a model where we assume that the effects are similar across categories, i.e., the model parameters are comparable across product categories. The latter model fits better than the first model (LMD: 87,603 vs. -87,793). All effects are significant, and none of the 95% posterior intervals contain 0, so the selected 4 brand benefits offer important predictors of purchase likelihood. Uniqueness appears to be the strongest predictor, while growing in popularity is the least important predictor in explaining brand purchase likelihood.

■ TB11

11- EMBA 2

Choice Modeling in Retail Settings

Contributed Session

Chair: Kathryn Sharpe, Assistant Professor, University of Virginia-Darden, P.O. Box 6550, Charlottesville, VA, 22906, United States of America, sharpek@darden.virginia.edu

1 - An Analysis of Assortment Choice in Grocery Retailing

Kyuseop Kwak, Lecturer of Marketing, University of Technology Sydney, Sydney, Australia, kyuseop.kwak@uts.edu.au, Sri Duvvuri, Gary Russell

Consumers in grocery retailing commonly buy bundles of products to accommodate current and future consumption. When all products in a particular bundle share common attributes (and are selected from the same product category), the consumer is said to assemble an assortment. This research develops a flexible choice model, suitable for the analysis of assortment choice. The model, a new specification of the multivariate logistic market basket model, is based upon the assumption that the utility of purchase of one item in an assortment depends upon the set of items already selected. The model permits complex demand relationships across assortment items, but does not require a detailed listing of item attributes. We apply the model to household assortment choice histories from the yogurt product category. Substantively, we show that yogurt choice is affected by brand quality perceptions (quality-tier competition). Moreover, we show that reaction to reductions in variety (number of yogurt flavors) is mediated by brand quality perceptions.

2 - An Empirical Analysis of Consumer Search Behavior in the U.S. Retail Banking Sector

Maria Ana Vitorino, Assistant Professor of Marketing, University of Minnesota, 321 - 19th Avenue South, Minneapolis, MN, 55455, United States of America, vitorino@umn.edu, Elisabeth Honka, Ali Hortacsu

This research empirically investigates the search and choice process of consumers opening new bank accounts. We develop a structural empirical model that reflects a consumer's decision process to add one or more bank accounts to his existing portfolio and includes his costly search for information about fees, product and bank services. Searching for this information is 'costly' for the consumer since it takes time and effort to contact financial institutions and is not viewed as pleasant by most consumers. Thus a consumer only investigates a few banks that together represent his consideration set and makes the final decision about his account(s) among the considered financial institutions. Our utility-maximizing modeling approach considers both the consumer's decision of which banks to include in his consideration set and the decision of which bank to open (an) account(s) with and allows us to quantify consumer search costs for a single product (i.e. one bank account) as well as for a bundle of products. To estimate the model we use data from a large survey that contains information on respondents' search behavior in terms of their consideration set of banks; the corresponding fees and interest rates for those banks; the actual bank chosen; the identity of the previous bank and demographic and socio-economic information about the consumers. While previous research has estimated search costs for a single product in many different categories such as fast-moving consumer goods or auto insurance, to the best of our knowledge, this is the first research empirically studying single and multiple product search using data on the account opening process in the U.S. retail banking sector.

3 - When Franchisee Effort Affects Demand: An Application to the Car Radiator Market

Tongil Kim, University of California, Berkeley, 2341 Grant St., Berkeley, CA, 94703, United States of America, ti_kim@haas.berkeley.edu

Consumers respond not only to the price and the product attributes, but also to the service effort provided by the seller. Empirically quantifying or measuring the service effort is difficult because it is often unobservable. This paper proposes an empirical framework of the role of service effort in demand, along with other traditional marketing mix instruments. The model allows us to measure the unobserved effort level without data on effort, which is hardly available in most empirical settings. The paper also presents an application to a unique data set obtained from a franchise in the car radiator market. This framework can be useful in examining various aspects of service-intensive industries. In particular, this study investigates a much-debated public policy question regarding resale price ceiling in franchising. A policy evaluation shows that resale price ceiling lowers franchisees' profit and weakens their incentive to exert effort, which reduces consumer welfare. However, I find that resale price ceiling can be consumer welfare enhancing in the car radiator market due to the lower price generated by the price ceiling.

4 - Understanding Consumer Response to Within-Chain Price Shock

Kathryn Sharpe, Assistant Professor, University of Virginia-Darden, P.O. Box 6550, Charlottesville, VA, 22906, United States of America, sharpek@darden.virginia.edu, Oded Netzer, Joel Huber

Consumers often react adversely to price increases within the same chain. We study how a firm induced price shock impacts consumers' price sensitivity, product choices, and consumer endorsements. We demonstrate that changing the product assortment can mitigate much of the negative effect of a consumer's experience of a sticker shock. To study price shock, we used a fast food context asking participants to make a food choice at a typical 'street' restaurant (to create a reference price), and subsequently, at an airport location (to simulate a credible price shock). In the airport choice, we manipulated the price increase across the entire product line as well as the choice set. After participants made their airport choice, they indicated whether they would rather keep their choice or search elsewhere in the airport. Finally, we asked participants to rate the restaurant experience similar to the rating scale on Yelp.com. With the results, we were able to compactly model price sensitivity as a function of the product offerings and price. We model the airport food choice and the decision to stay at a retailer using a nested logit model. The results of the model demonstrate that quality upgrades can maintain revenue despite a large price increase. Furthermore, the model predicts the likelihood that a customer will be lost due to a substantial price increase or change in assortment. Subsequent analysis shows that even after accounting for customers' decisions to keep their choices at the restaurant, sticker shock can have a negative impact on the way consumers evaluate their experience at the restaurant. Still the potential loss of revenues can be partially mitigated by altering the choice set, thus inducing consumers to be less price sensitive.

5- Using In-Store Video and RFID Tracking to Explicate Unplanned Consideration and Purchase Conversion

Jeff Inman, Albert Wesley Frey Professor of Marketing, University of Pittsburgh, 350 Mervis Hall, Katz Graduate School of Business, Pittsburgh, PA, 15260, United States of America, jinman@katz.pitt.edu, Yanliu Huang, Sam Hui, Jacob Suher

Retailers and manufacturers are keenly interested in understanding unplanned consideration and purchase conversion, but data that capture in-store product consideration were unavailable in the past. In this research, we collect a novel dataset that records shopping behavior at the point of purchase using in-store video and RFID tracking that allows us to directly observe product consideration during the shopping trip. In conjunction with an entrance survey of purchase intentions, we conduct several descriptive analyses that focus on the incidence, category propensity, behavioral characteristics, and outcome of unplanned consideration. Our results reveal several new empirical insights. First, we find significant category-level complementarities between planned items and unplanned considerations, which we capture using a latent category map. Second, planned and unplanned consideration differ in key behavioral characteristics (e.g., likelihood of purchase, time of occurrence, number of product touches). Third, higher likelihood of purchase conversion is significantly associated with several dynamics factors (remaining in-store slack, outcome of the last consideration) and behavioral characteristics (number of displays viewed, distance to shelf, references to shopping list). Implications of these findings for research and shopper marketing are discussed.

■ TB12

12- Geneve

Promotion

Contributed Session

Chair: Serdar Sayman, Koc University, Istanbul, Turkey, ssayman@ku.edu.tr

1 - A New Mechanism to Understand Consumer Redemption Behavior

Kissan Joseph, Associate Professor, University of Kansas, 1300 Sunnyside Avenue, Lawrence, KS, 66045, United States of America, kjoseph@ku.edu, Zelin Zhang, Minghui Ma

Consumer redemption behavior has been the focus of much scholarly inquiry and the extant literature has documented diverse empirical regularities. These include temporal decay in redemption behavior accompanied by a second mode close to expiry, greater redemption with shorter redemption windows, higher consumer satisfaction with longer redemption windows, increased procrastination as the benefit associated with the offer increases, and decreasing effort aversion associated with longer redemption offers (Inman and McAlister 1994; Shu and Gneezy 2010; Soman 1998). We complement this body of work by furnishing a new mechanism to understand consumer redemption behavior. Specifically, we introduce two new constructs, namely, forgetting and stochastic redemption costs, to characterize redemption behavior. In addition to successfully predicting the diverse empirical regularities, our model also offers a somewhat more nuanced prediction for the impact of increased benefits on procrastination. We also provide experimental evidence for the notion of efficient postponement inherent in our mechanism.

2 - Designing Multi-Brand Promotions as Commercial Innovations

Jochen Reiner, Goethe University Frankfurt, Grueneburgplatz 1, Frankfurt am Main, 60323, Germany, jreiner@wiwi.uni-frankfurt.de, Martin Natter

Multi-brand promotions (MBPs) are sales promotions which incorporate two or more brands, whereas the brands can either belong to distinct companies or to a single company owning several brands. The reasons for using such MBPs are widespread: efficient usage of the marketing budget, accessing retailer's promotion calendar using a commercial innovation, creating spillover effects, supporting smaller brands which would not get enough money for an own promotion, enhancing sales or targeting of new customer groups. Despite the wide usage of MPBs, empirical research remains scarce. Based on survey data that contain more than 3,000 respondents who evaluated more than 20 sales promotions we investigate the drivers and success factors of MBPs relative to standard single brand promotions. We specifically analyze the effect of MPBs on transactional metrics; i.e., awareness, participation and redemption of sales promotions.

3 - Measuring the Effect of Cross Promotions: The Case of the Motion Picture Industry

Bharat Sud, Assistant Professor, University of Guelph, College of Management and Economics, Guelph, ON, N1G0, Canada, bsud@uoguelph.ca, Salma Karray, Kamal Smimou

We assess the monetary effects of cross promotions. Using data from the motion picture industry, we conduct a cross-sectional analysis to explore the effects of cross promotions and their characteristics on movies' box office sales. We find that cross promotions are most effective when initiated prior to the movie release. In line with previous findings from the brand alliance literature, we show that high levels of fit of the promoted brands with the movie lead to increased box office sales, especially during the opening weekend. Finally, our results indicate that asymmetries in the brand equities of the movie and its partnering firms can harm the overall performance of the movie.

4 - A Theory of Retailer Price Promotions using Economic Foundations

Kurt Jetta, CEO and Founder, TABS Group, Inc., 2 Corporate Drive, Suite 254, Shelton, CT, 06484, United States of America, kurtjetta@tabsgroup.com

This paper offers a Theory of Retailer Price Promotions (TRPP). Specifically, the theory states that incremental retail sales generated by these promotions are entirely incremental to the promoting manufacturer, the promoting retailer, and the market, overall. There is no post-period reduction in sales (dip) either in the short or long-term, nor is there a reduction in sales from competing brands, nor is there a reduction of sales for the promoted item in competing retailers. It is a Complete Category Expansion Effect (CCEE). The paper will discuss the underlying theories of consumer demand that support the CCEE, and it will review how prior research on the topic has not provided a microeconomic context for interpreting the results. Several empirical examples will be offered to support the TRPP.

5- Buying Repeatedly or using for a Long Time? Price and Non-Price Promotion Effectiveness on Hedonic and Utilitarian Products

Serdar Sayman, Koc University, Istanbul, Turkey, ssayman@ku.edu.tr, Selin Erguncu

Purchase event feedback is a form of persistence in consumer brand choice decisions, whereby consumers have a higher probability of choosing brands that they have purchased previously. Modeling this persistence effect, we first study how it works within sales promotion context. We show that purchasing a promotional product results in a different level of persistence than purchasing a regular product. Second, we define the kinds of this persistence effect. We posit that purchase event feedback is driven by two distinct components of past purchase decisions: brand-choice and quantity decision. This distinction is important because these drivers work through different mental mechanisms and result in different behavioral consequences. Finally, comparing various product categories, we examine the difference in the effects of past brand-choice and quantity decisions on current choices. We hypothesize that past brand-choice decisions are stronger than past quantity decisions in affecting current brand choices, while category type (i.e., hedonic vs. utilitarian products) moderates this effect. Accounting for consumer heterogeneity, we examine our predictions with hierarchical logit models. Managerial implications for purchase event feedback mainly include the optimal category pricing and promotion profitability. Showing how price and non-price promotion effectiveness differ across product categories, our findings further suggest either stockpiling-induced or purchase-induced promotions to be more effective on hedonic and utilitarian products.

■ TB13

13- Luzern

Managing Online Operations

Contributed Session

Chair: Kitty Wang, Assistant Professor, City University of Hong Kong, Marketing Department, Tat Chee Avenue, Kowloon, Hong Kong - PRC, kitty.wang@cityu.edu.hk

1 - Familiarity with Destination and Information Requirements. Criteria for Hotel Websites' Design

Ruben Huertas-Garcia, University of Barcelona, Diagonal 690, Barcelona, 08034, Spain, rhuertas@ub.edu, Juan-Carlos Gázquez-Abad, Irene Esteban-Millat, Francisco J. Martínez-López

Internet has become one of the most important channels to promote and sell tourism services. However, why Internet users choose a particular Website? What are the most relevant aspects in such decision? These questions are especially relevant for tourism suppliers and distributors. For a website to be attractive it requires a balance between its design and the information needed by its target audience. The main objective of this paper is to investigate how target market's previous knowledge about their preferred destinations affects information requirements from a website. More specifically, we examine how the familiarity with the destination influences the design of a hotel website. In order to do so, we propose an experimental study using potential customers of a young-people tourist destination, which combines a conjoint analysis with a between-subjects design. Our experimental research provides some clear guidelines for how tourism suppliers and distributors should design their websites: (1) while information about complementary activities plays an important role in selecting a hotel website, its impact increases as the familiarity with the destination decreases; (2) enriching the website (e.g., offering a sophisticated graphic display) is more important for tourists unfamiliar with the destination; (3) Information about the number of rooms is relevant for unfamiliar travellers. In addition, these tourists prefer hotels with fewer rooms, and (5) price has a stronger impact on familiar travellers than unfamiliar ones.

2 - Retailer Return Management: Combining Product and Customer Information to Maximize Profit

Siham El Kihal, PhD Student, Goethe University Frankfurt, Grueneburgplatz 1, Frankfurt, 60323, Germany, elkihal@wiwi.uni-frankfurt.de, Christian Schulze, Bernd Skiera

Customer returns and the associated costs pose a major challenge for online retailers. Lowering returns can yield a significant increase in profits and is of high practical and scientific relevance. We investigate how online retailers should manage product returns. To this end, we develop and test twelve return management strategies. These strategies are either based on customer-information, product-information, or both. Also, the strategies differ in how they determine undesirable customer and products, i.e., via heuristics based on different metrics (rates, costs, profits, and lifetime values). To evaluate the twelve return management strategies, we use an extensive dataset of a large European online retailer including over 7.5 million products purchased. The first results show that the change in profit differs widely between strategies and confirms that suitable return management strategies have substantial potential for profit improvements. Keywords: product returns, return management, product lifetime value, decision heuristic.

3 - Social Media Marketing Trends in Turkey: A Profile Analysis of Turkish Corporations

Mina Seraj, Bogazici University, IIBF Isletme Bolumu Bebek, Istanbul, Turkey, mina.seraj@gmail.com, Aysegul Toker

Driven by the significant online activity of Turkish consumers, many Turkish companies have started to adopt social media (SM) marketing. Most studies have investigated consumer side of SM adoption and little research is available on company adoption. This study aims to understand the adoption stages and how companies mature in terms of SM marketing in Turkey. In addition, it discusses the dimensions that influence SM adoption on the business strategy front. We examine major Turkish firms through both qualitative and quantitative methods backed up with literature review in order to segment them with respect to their adoption levels. Our qualitative analysis shows that the following four major dimensions define SM adoption: (1) strategic approach to SM, (2) company-wide integration, (3) interactivity, and (4) responsiveness. Based on these four dimensions, a survey with forty items was prepared for the quantitative analysis. Data was collected from 145 companies and analyzed through K-means cluster analysis in order to reveal the different groups of companies with differentiating strategies, SM applications, and therefore maturity levels. The resulting three maturity levels in terms of SM adoption are: beginners, who do basic information sharing and campaign management in a usually non-interactive manner and seek no integration of processes; adaptors and appliers, who engage in simple interactions on SM through mostly tactical applications as well as tracking and analyzing SM to some extent; and finally strategists, who incorporate SM into major company strategies and processes, provide innovative and engaging multimedia environments for consumers to interact, and decipher unstructured online data through more sophisticated tools. This work was supported by Bogazici University Research Fund (Project No: 6523).

4 - Task Facilitative Tools and Choice Goals: A Process-View Study of e-Stores

Prithwiraj Nath, University of East Anglia, Norwich Business School, Norwich, NR4 7TJ, United Kingdom, P.Nath@uea.ac.uk, Sally McKechnie

Although the effects of interactivity and personalisation tools on browsing experience has been the subject of previous research, the impact of variable levels of such features on buyers' evaluations of choice goals has received relatively little attention. To address this gap, this study conducts an experiment with 273 subjects to examine these relationships in the context of complex, high-risk purchase situations where the seller is new to the market and buyers demonstrate variable risk averseness. Findings identify a positive association between website design features and browsing outcomes. The study provides direction on determining the combination of website attributes according to buyer characteristics.

5- Understanding the Value of Online Channels: An Investigation of the Online vs. Offline Interactions

Kitty Wang, Assistant Professor, City University of Hong Kong, Marketing Department, Tat Chee Avenue, Kowloon, Hong Kong - PRC, kitty.wang@cityu.edu.hk, Avi Goldfarb

This project is motivated by the gap between academic findings and real world practices in the context of retailing channels. The existing academic literature consistently finds that online and offline channels substitute for one another; however, traditional retailers are increasingly expanding their business to online channels. Given the consistent finding, we ask why do traditional retailers still introduce the online channel if it can potentially hurt a traditional retailer by increasing its operational cost and cannibalize its physical stores? In this project, we primarily make use of a comprehensive dataset provided by a U.S. based major multi-channel, multi-brand specialty retailer. This dataset provides a unique opportunity to answer this question because it includes online and offline data from both the supply (i.e., firm) and demand side (i.e., consumers). We identify three hypotheses under which having an online channel would bring value to a traditional retailer by analyzing consumers' online and offline interactions with the retailer. First, offering the online purchase option helps a traditional retailer to stay competitive. Second, the online channel is valuable for market expansion purposes–it is less costly to access consumers from a remote area through the online channel. And third, there may be economies of scope. The online channel can genuinely complement offline channels by reducing consumer search costs, company marketing costs, and even company distribution costs. This research empirically examines each of these possibilities: it provides opportunity to understand the role of online channels, and the underlying mechanism of how online channel adds value to offline channels and the firm as a whole.

■ TB14

14- Zurich

Innovation Management

Contributed Session

Chair: P.V. (Sundar) Balakrishnan, Professor, University of Washington, 18115 Campus Way NE, Bothell, Bothell, WA, 98011-8246, United States of America, sundar@u.washington.edu

1 - Strategically Sequencing Major and Minor Innovations

Timothy Heath, Professor, HEC Paris, 1, rue de la Liberation, Jouy-en-Josas, 78351, France, heath@hec.fr, Thorsten Hennig-Thurau, Bruno Kocher, Max Chauvin, Subimal Chatterjee, Suman Basuroy

An empirical study of films (Study 1) and an experiment addressing films, music, and tablet computers (Study 2) assessed the effects of different sequences of major and minor innovations on outcomes such as profitability and product boredom. The results suggest that managers should first make minor innovations to leverage, though spend, brand equity, and thereafter introduce larger innovations to replenish brand equity and re-stimulate interest. Study 1 tested 92 film franchises from www.boxofficemojo.com and collected additional information for the films in each franchise up to four sequels. The innovation-magnitude by serial-position interaction on both revenues and ROI was significant: early in a film franchise, smaller innovations were more effective than larger innovations, whereas later in a franchise, larger innovations were more effective. Study 2 extended Study 1 by experimentally testing consumer boredom with each of three sequels to a film, a band's music, and a computer tablet. Three innovation sequences were tested: all-minor, minor-major-minor, and major-minor-minor. The minor-major-minor sequence produced significantly less boredom than did the major-minor-minor sequence across Sequels 1-2 combined, and across Sequels 1-3 combined, a pure sequencing effect given that the level of innovation was constant across these two sequences. The results also indicate innovation habituation: By the third sequel, the major-minor-minor sequence was producing more sequel boredom than the all-minor sequence even though (1) both sequences offered the same improvements at Sequels 2 and 3, and (2) the major-then-minor sequence had produced more innovation over the life of the product.

2 - A Demand-Side Framework for Incumbent Inertia and Innovativeness

Jonathan Bohlmann, North Carolina State University, Dept. of Bus. Mgmt., Campus Box 7229, Raleigh, NC, 27695, United States of America, jon_bohlmann@ncsu.edu, Francisco-Jose Molina-Castillo, Jelena Spanjol, Michael Stanko

Incumbents are often–but not always–posited to suffer from various types of inertia, making them slow to innovate or respond to market changes. Prior studies on the supply-side sources of incumbent inertia (factors internal to the firm) are more prevalent than those on demand-side factors, which relate to a firm's customers and may explain potential incumbent advantages. We introduce a framework for a demand-side perspective to incumbent inertia. New products at 279 firms are empirically examined to assess the effects of demand-side inertia factors–switching costs, customer preference stability, and network externalities–on innovativeness. Overall, demand-side factors are shown to have positive effects on innovativeness, contrasting with supply-side factors (e.g., routines or assets) which typically inhibit innovativeness. Consumer preference stability is the only factor negatively related to innovativeness, though only for early entrants. Network externalities and switching costs substantially increase both market and technological innovativeness (particularly for early entrants). The results indicate that demand-side inertia factors are critical determinants of innovativeness, allowing for a more comprehensive perspective of incumbent inertia and performance. We advocate several opportunities for future research that consider the complex relationships among incumbent inertia factors. We also examine incumbent strategies that interrelate supply- and demand-side considerations.

3 - Why Peripheral Innovations May Have Higher Adoption Intentions than Core Innovations

Tripat Gill, Associate Professor, Wilfrid Laurier University, 75 University Street, Waterloo, ON, N2L3C5, Canada, tgill@wlu.ca, Zhenfeng Ma, Ying Jiang

Extant literature on innovation adoption has focused primarily on core innovations and there is scant research on innovations in peripheral components. We compare core versus peripheral innovations using the construct of innovation locus (the place in the product system where innovations occur) and innovation newness (really new versus incremental innovations). Specifically, we examine the effect of placing an innovation (e.g., power generated by motion / kinetic energy) in the core (i.e., having it built-in into the product) versus placing it in a peripheral (i.e., developing a portable charger that generates power from kinetic energy). In Study 1 we show that for a really new innovation, situating it in a peripheral results in higher purchase intentions as compared to integrating it into the core. In contrast, for incrementally new innovations, purchase intentions are not influenced by innovation locus. In Study 2 we show that a really new innovation situated in a peripheral significantly increases the attractiveness of the base product. We propose that this preference for placing a really new innovation in the peripheral is due to risk localization (i.e., consumers perceive a lower functional risk in the peripheral component as compared to the core). In Study 3 we test this risk localization effect by manipulating the optionality of the really new innovation to the product system. Specifically, we show that when the innovation is perceived as non-optional (i.e., it is indispensable for the product), the preference for situating the innovation in the peripheral (vs. the core) is nullified.

4 - Waiting for the iPhone? Production Constrained Diffusion of Innovation

P.V. (Sundar) Balakrishnan, Professor, University of Washington, 18115 Campus Way NE, Bothell, Bothell, WA, 98011-8246, United States of America, sundar@u.washington.edu, Surya Pathak

Does limited supply of a new product affect the consumer adoption process? Models of innovation diffusion typically depict an inexorable momentum once the process begins to roll. Limited production capacity, however, can place a cap on this process, leading to waiting lines of potential customers, thus diminishing overall service quality. As analysts and policy makers we would therefore like to derive the minimum industry-level supply capacity that would be needed to achieve an unimpeded and unimpaired diffusion of new products. We propose a production constrained diffusion model that considers an exogenous industry production capacity and accounts for word-of-mouth effects from adopters as well as waiting customers. We consider both the constant and changing production scenarios and derive analytical expressions for minimum capacity. We also present a dual objective non-linear least squares procedure with large-scale grid search for estimating the parameters our model. We test our model on new product innovation data sets that have been analyzed in prior literature. We show that product shortages and customer waiting was present in those markets. We are able to corroborate our findings with independent external sources of evidence. We discuss the implications of our research from a policy maker's and an analyst's perspective.

Thursday, 1:30pm - 3:00pm

■ TC01

01- Montreux

Profitable Modeling of the Customer Database

Cluster: Internet and Interactive Marketing

Invited Session

Chair: Arnaud De Bruyn, Professor of Marketing, ESSEC Business School, Avenue Bernard Hirsch, Cergy, 95000, France, debruyn@essec.edu

1 - Improving Decision Tree Segmentation through Leaf Modeling for Direct Marketing

Kristof Coussement, IESEG School of Management, 3 Rue de la Digue, Lille, France, k.coussement@ieseg.fr

Decision trees are often used to segment the customer database into groups of customers that are as homogeneous as possible in terms of their response behavior. Moreover, once the decision tree is built, the response incidence in a leaf is assigned to all cases in that leaf. These response probabilities are then used to determine which customer will be prioritized in the direct marketing campaign. This research study suggests improving decision tree segmentation by proposing a novel two-step approach that combines decision tree building with leaf modeling in an attempt to capture additional customer heterogeneity, improve direct marketing efforts by making better predictions, and increase interpretability per leaf segment. This study validates and benchmarks the new decision trees approach on a real-life customer response dataset from the retail industry.

2 - Modeling Unobserved Drop-Out Rate to Optimize e-Panelist Lifetime Value

Alina Ferecatu, PhD student, ESSEC Business School, Avenue Bernard Hirsch, BP 50105, Cergy Pontoise, 95021, France, alina.ferecatu@essec.edu, Arnaud De Bruyn, Prithwiraj Mukherjee

Online access panels are of paramount importance in marketing research, and constitute a great asset for market research firms. In this paper, we show that traditional models fail to quantify the true 'cost' of an electronic solicitation, and we demonstrate that each additional solicitation not only decreases the likelihood of future participation, but might even increase the dropout rate (a mostly unobserved phenomenon that has a dramatic impact on the lifetime value of an e-panelist). Our model estimates the likelihood that an e-panelist will respond positively to a new solicitation as a function of his past behavior and how many times he has been solicited so far, and integrates a latent 'wear out' effect. To obtain individual-level wear out effects, we add a hierarchical Bayesian structure to our e-panel lifetime model. We fit the model on a sample of more than 700,000 e-mail solicitations sent over a period of 3 years, and demonstrate that each additional solicitation contributes to a long-lasting wear-out effect; the unobserved drop-out rate reaches 7% on average at each additional solicitation. To incorporate our model into a more comprehensive e-panel management system, we determine an optimal strategy in terms of both quantity and timing of the solicitations tailored to each individual e-panelist, via machine learning techniques. The proposed management system would help online panel companies maximize e-panelists expected lifetime value.

3 - Predicting Music Rank and Sales using Big Social Data

William Rand, University of Maryland, 3457 Van Munching, College Park, MD, 20742, United States of America, wrand@umd.edu, Derek Monner, Yogesh V. Joshi

The large scale of social media data presents brand managers with a huge potential source of insights and knowledge about their consumers, but analyzing these vast datasets in a timely and efficient manner can be difficult. Short text, high frequency social media microblogs such as Twitter, and Facebook status updates are fundamentally different from previous long, costly forms such as blogs, forums and user reviews. The low cost of involvement in microblogging means that users create orders of magnitude more individual pieces of information, and that more users become involved due to the low barrier to entry. The result is a larger set of data representing a more diverse set of users in terms of demographics and psychographics. We present a method using simple linear models and support vector machines that uses high volume social media (Twitter) data to make market demand predictions for cultural products, specifically music albums. Our models enable improved prediction of both sales rank (Billboard charts) and actual sales data, using features such as volume, number of connections, frequency of output, the use of URLs and hashtags, and sentiment. We find that the presence of links and positive sentiment is highly predictive for debut rankings and sales of the albums, while positive and negative sentiment is highly predictive of post debut rankings and sales. We show that our method generalizes to out-of-sample test data at a higher predictive level than previous descriptive methods, using long form [blogging, reviews, etc] data as well as conventional data. We posit that the high frequency and diverse representation of microblogs data makes it a better predictor of actual demand than these previous methods.

4 - Bayesian Profiling of Customers using Census Bureau Data

Arnaud De Bruyn, Professor of Marketing, ESSEC Business School, Avenue Bernard Hirsch, Cergy, 95000, France, debruyn@essec.edu, Thomas Otter

Firms use external data sources (e.g., Census Bureau data, commercial databases) to infer the most likely characteristics of their customers and thus better predict their profiles and needs. This technique is becoming especially important online, where customers are wary of sharing their personal profile information, and firms require unobtrusive techniques to infer them. However, the simple count method most commonly used in this effort provides severely biased estimates. We introduce a Bayesian inference approach, and show that the simple count method is a special case of our model, where the model implicitly imposes an informative –though inadequate— prior on customers' profiles. We illustrate the two models with a simulation and two empirical applications. For instance, the Bayesian inference model identifies 99.9% of people's political affiliations based on their zip codes (cf. 35.6% with simple count method). Therefore, the proposed approach offers more precise estimates that can enable marketers to profile their customers and tailor their marketing strategies to match customer characteristics.

■ TC02

02- Lausanne

User-Generated Content - II

Cluster: Internet and Interactive Marketing

Invited Session

Chair: Chun-Yao Huang, Professor, National Taiwan University, 1, Sec. 4, Roosevelt Rd., Taipei, Taiwan - ROC, chunyaohuang@ntu.edu.tw

1 - A Study of the Effect of Online Review Reward on Information Richness and Sentiment Expression

Lu Wang, Zhongnan University of Economics and Law, Nanhu Street No.1, Hongshan District, Wuhan, China, yanxundo@gmail.com, Jingwen Chen, Shan Zhao

Since online customer review has significant impacts on customer's purchase decision and product sales, it has been regarded as a new marketing tool nowadays. Moreover, online customer review is a major source for customers to find product information to reduce risks. However, differ from American customers, Chinese customers always seek for but seldom voluntarily provide information. Since the lack of quantity and quality of review has a negative effect on sales, some Chinese online transactional platforms and sellers attempt to reward customers for providing high-quality reviews. Some scholars have found that reward has great impacts on customer behavior such as referral likelihood and repetitive purchase, but there is limited research and almost no empirical work on rewarded review. Based on the previous studies, we defined information richness as the length and information volume that a review carries. Furthermore, inspired by the method of natural language processing (NLP), we conduct a phrase-level sentiment analysis and classify customers' sentiment expression into two dimensions namely sentiment polarity and sentiment intensity. With the empirical analysis of 1044 samples from a famous C2C e-platform website, results show that reward can significantly improve the information richness of online customer reviews. However, the sentiment customer expressed remains unchanged and negative information will not be concealed.

2 - Impact of Monetary Reward Program on Consumers' Online Product Reviews

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Consumer-generated online product reviews have long been recognized as an important source of product information. Consumers rely on online reviews to infer product quality and make purchase decisions. Due to the significance of online product reviews, firms have adopted various reward programs to encourage consumers to rate the products they have purchased and share their experiences with others. Despite the extensive applications in practice, to date we still have a limited understanding of how such reward programs influence consumers' online product reviews. To close this gap, the present research focuses on monetary reward program, one of the most widely adopted programs through which online retailers offer monetary incentives to consumers in exchange for their reviews, and investigates its impact on consumers' decisions on whether and how to provide their reviews. Using the review data from two popular online retailers, one using a monetary reward program and the other not, we empirically demonstrate that monetary reward program does influence the quantity, the valence, and the quality of product reviews. As expected, monetary incentives can effectively motivate consumers to post reviews. However, consumers who are attracted by monetary incentives are more likely to post positive and low-quality reviews than those who are intrinsically motivated. In addition, these effects are more pronounced for consumers who are active in posting online reviews than those "inactive" ones. We further discuss the theoretical contributions and managerial implications of these findings.

3 - Naive or Savvy: How Credible are Online Reviews for Credence Services?

Shannon Lantzy, University of Maryland, 3330 Van Munching Hall, College Park, MD, 20742, United States of America, slantzy@rhsmith.umd.edu, Katherine Stewart, Rebecca Hamilton

Online reviews allow consumers to share information about their service experiences with other consumers. Theoretically, sharing this information should reduce market information asymmetries between potential consumers and service providers because many attributes of a service experience cannot be evaluated prior to consumption. For example, although a consumer might be able to evaluate prices of entrees (a search attribute) prior to eating at a restaurant, it is difficult to evaluate their tastiness (an experience attribute) without consuming a meal, and even after eating there, a consumer cannot verify the claim that they are made with organic ingredients (a credence attribute). Although consumers have numerous opportunities to review credence services (e.g., Angie's List), extant research has focused only on reviews of search and experience goods. Because consumers cannot assess the quality of credence attributes even after consumption, consumer reviews of services dominated by credence attributes (e.g., doctors, auto mechanics) are of dubious credibility. We examine whether consumers make claims about credence attributes in online reviews and whether consumers rationally discount claims about credence attributes. First, we content analyze reviews of various service providers to compare claims across services dominated by credence vs. experience attributes. Next, we design and test a rigorous classification method for identifying credence and experience services based on their core and peripheral attributes. Finally, we conduct a series of experiments to explore consumers' perceptions of reviews, manipulating factors such as the type of service provider, the type of attribute in the review, and the valence of the review.

4 - Predicting the Co-Evolution of Digital Content and its Consumer Generated Reviews

Chun-Yao Huang, Professor, National Taiwan University, 1, Sec. 4, Roosevelt Rd., Taipei, Taiwan - ROC, chunyaohuang@ntu.edu.tw

Digital content, a large proportion of which is free online, has been competing for eyeballs around the world for various purposes. In the ecosystem of such competitions, there is a large amount of consumer (viewer/reader) generated reviews that accompanies the 'original' digital content. Although we have seen an emerging stream of research that analyzes and models the dynamics of online consumer reviews (e.g., Godes and Silva 2012, Ho et al. 2012, Moe and Schweidel 2012, Sonnier et al. 2011), how content downloads and their corresponding reviews co-evolve in the forecasting context is an area awaits for further explorations. Based on longitudinal data (including download counts and consumer generated reviews) of talks posted on TED.com and related data collected from YouTube, this study explores: (1) Can the number of online reviews/comments of a specific digital content help predict its number of downloads over time? (2) Can the text analysis of online reviews/comments of a specific digital content help predict its number of downloads over time? (3) Can the number of a specific digital content's downloads help predict the number of online reviews/comments over time?

■ TC03

03- Bern

Social Media Marketing

Cluster: Internet and Interactive Marketing

Invited Session

Chair: Wei Zhang, Fudan University, School of Management, No. 670, Guo Shun Road, Shanghai, China, daisyzw@gmail.com

1 - A High Dimensional Dynamic Factor Model for Digital Marketing

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A digital marketing environment is characterized by streams of data on many variables arriving at irregular time intervals. For instance, a brand's Facebook traffic represents brand's awareness in various segments, but the lack of traffic on a given day does not necessarily represent lack of brand awareness. Such data irregularity arises due to a high number of possible actions that a target user may take on many metrics. Given the high dimensionality and data irregularity, the determination of effectiveness of digital marketing media necessitates new approaches. To this end, we formulate a new approach to tackle the high number of variables (> 2000), from constantly shifting marketing campaigns, and time-varying digital marketing effectiveness. To illustrate the nature of dimensionality, we note that 2000 metrics result in a covariance matrix that contains 2 million (= 2000 x 2001/2) parameters to be estimated, which exceed the available sample size of 100,000 observations (2000 metrics x 50 weeks). We solve this high dimensional problem using a combination of techniques for identifying influential variables, temporal dimension reduction, and dynamic linear models to estimate the effectiveness of digital marketing channels. We will present results obtained from applying the proposed model to a major American brand's Facebook data.

2 - Social-Media Experiment for Developing Marketing Strategy of Old Media against New Media

Akihiro Inoue, Professor, Keio University, 4-1-1 KBS Hiyoshi, Kohoku-ku, Yokohama, 223-8526, Japan, ainoue@kbs.keio.ac.jp, Akihiro Nishimoto, Atsuhiko Iino

We have been aware of the decrease of old media, such as TVs, newspapers, magazines, and radios. On the other hand, we observe the increasing new media, especially social media such as Facebook and Twitter. Some argue that the new media would replace the old media, in other words, they are substitute. Others discuss that these old and new media are complimentary and co-survive. In any case, marketing managers have to take into account both types of media in developing marketing communication strategy. Given this marketing environment, old-media companies have to develop their marketing strategy in terms of media survival. In this research, we focus on the marketing strategy of newspaper media and examine the implications for their competitive strategy against new media. We run an experiment of social newspaper with the cooperation of a largest newspaper company in Japan and used the real newspapers including the real articles and ads on the experiment site. As well as social TVs and social readings, we developed a digital newspaper site where we allow the audiences, professional journalists, and celebrities to do Twitter. On the back log, we gathered the access data and the Twitter text data. Also, we implemented a survey after the experiment so as to measure the media-related questions and the evaluation on the site and on the ads. We analyzed the data in terms of the media perceptions on both old and new media, the effects of social newspaper on the newspaper media, and on the newspaper ads. The details and the implications of media strategy are to be presented.

3 - Crisis Management in Social Media Era - The Mechanism of PR Crisis Driven by Weibo

Wei Zhang, Fudan University, School of Management, No. 670, Guo Shun Road, Shanghai, China, daisyzw@gmail.com, Cheng Zhang

China Internet (564 million users till end of 2012) owned unique social media landscape but developed as quickly as western countries. Especially, microblogging, represented by SINA Weibo, exploded onto the Chinese Internet scene in 2010, and now penetrated 55% of China Interest user with 308 million participants. Weibo, playing similar functions in China as both facebook and twitter in other places of the world, has been becoming critical social media for online communications, and playing a pivotal role not only in brand marketing but also in breaking and amplifying crises and scandals. This research is focus on top 10 online crisis of three categories (public credibility crisis, personal crisis, brand crisis) driven by Weibo during year 2011 and 2012, to analyze their breaking and spreading mechanism (i.e. occasion, key opinion leader, timeline, buzz volume, duration, spreading network, responding approach, sentiment, etc.). Crisis evaluation indexes are modeled to classify the social media crisis with good vs. bad management and to imply marketers and researchers the unique features of crisis management in social media era and how to better handle them. There were 64 million Weibo posts for those three types of top crises during 2011 to 2012, together with reference data about top 50 yearly brand crisis on Weibo platform.

■ TC04

04- Monch

Modeling Facial Expression in Advertising and Media

Cluster: Special Sessions

Invited Session

Chair: Thales Teixeira, Assistant Professor, Harvard Business School, Morgan 165, HBS, Boston, MA, 02163, United States of America, tteixeira@hbs.edu

1 - Inferring Viewer's Preferences toward Ads through Facial Expression and Eye Gaze

Li Xiao, Pennsylvania State University, University Park, PA, United States of America, lixiao@psu.edu, Min Ding

Video ad display systems are widely used in marketing practice nowadays, just to name a few, digital POP display system in retail stores, digital billboards at bus stops, and video screens installed on the seatbacks in taxis and airplanes. In such system, it will show a set of ads, one after another in a predetermined sequence, and then loop back to start from the first ad. In this paper, we propose an intelligent system to improve the performance of the existing system described above. The intuition is simple. There is substantial heterogeneity among people's preferences toward various ads, and the performance of this system can thus be potentially improved if the system can infer different viewers' preferences toward ads while they watch, and make real time decision on which ad will be shown to a specific viewer based on the inferred preferences. To achieve this, the proposed system videotapes a view's face while s/he is watching video ads. We extract frames at specific intervals, and then use computer vision techniques and machine learning tools to analyze each frame for (1) the viewer's facial expression recognition and (2) eye gaze detection. For each frame, the recognized facial expression and detected eye gaze are matched to the corresponding frame on the video ad shown at the exactly the same time. In this way, the system knows what facial expression is in response to what specific component in the ad. By doing this in real time, the system can estimate and update a viewer's preferences toward ads, then search the ad database, and select and play a new ad next that is more likely to attract this viewer's attention and result in positive attitudinal and behavioral consequences. We test the proposed system in an empirical study.

2 - Face-Tracking Recommendation System Applied to Comedy Movie Trailers

Xuan Liu, University of Maryland, College Park, MD, United States of America, xuan.liu113@gmail.com, Michel Wedel, Thales Teixeira

Novel remote face-tracking technologies allow online media to seamlessly capture moment-to moment data on consumers' reactions to content. This data allows web-based content providers such as Netflix, Amazon and iTunes to improve the recommendations of movies and TV shows to their customers. However, it requires firms to capture a process a huge amount of data (i.e. Big Data) and provide quick recommendations. This work proposes a time-series classification model for the purpose of using facial expression data as the basis for a video recommendation system. We calibrate the model using experimental data collected from participants' facial responses while watching comedy movie trailers on the web and relate diagnostic emotioninducing scenes to the viewer's decision of watching the movie afterwards. The proposed method allows filmmakers to optimize the effectiveness of movie trailers, such that they increase people's desire to watch the movie, by balancing the amount of highly joy-inducing content shown in order to maximize interested, while not giving away too much of the story in the trailer.

3 - Why, When and How Much to Entertain Consumers in Advertisements? A Web-based Facial Tracking Field Study

Thales Teixeira, Assistant Professor, Harvard Business School, Morgan 165, HBS, Boston, MA, 02163, United States of America, tteixeira@hbs.edu, Rosalind Picard, Rana el Kaliouby

The presence of positive entertainment (e.g., visual imagery, upbeat music, humor) in TV advertisements can make them more attractive and persuasive. However, little is known about the downsides of using too much entertainment. This research focuses on why, when, and how much to entertain consumers in TV advertisements. We collected data in a large-scale field experiment using 82 ads with various levels of entertainment shown to 275 consumers in their homes and workplaces. Using a novel web-based face tracking system, we continuously measure consumers' smile responses, and viewing interest and purchase intent. A simultaneous Bayesian Hierarchical model is estimated to assess how entertainment affects purchases by endogenizing viewing interest. We find that entertainment has an inverted U-shape relationship with purchase intent. Importantly, we separate entertainment into that which is associated with the brand versus that which is not, and find that the former is directly positively associated with purchase intent while the latter is not.

4 - Applications of Face-Tracking in Industry

Jay Turcot, Affectiva Inc., Waltham, MA, United States of America, jay.turcot@affectiva.com

An industry speaker will present their latest research on applications of face-tracking models and insights.

■ TC05

05- Montblanc

Marketing and Performance III

Contributed Session

Chair: Christine Moorman, Duke University, 100 Fuqua Drive, Durham, NC, 27708, United States of America, moorman@duke.edu

1 - Market Orientation-Corporate Brand Performance Relationship in Indian B2B Firms: A Bayesian Analysis

Subhashish Chakravarty, Indian Institute of Management Udaipur, MLSU Campus, Udaipur, 313001, India, subhashish.chakravarty@iimu.ac.in, Soumya Sarkar

In order to remain competitive under the multinational onslaught following the liberalization of 1991, Indian firms need to strengthen their corporate brands as they convey a bigger story to the customers than product brands by incorporating the values and promises of the organizations driving the brand. This is all the more crucial in the B2B domain. The strength of corporate brands is a marker of the overall performance of the firm. Adoption of market orientation as a strategic marketing initiative is expected to enhance the performance of a firm but the impact of market orientation on business performance is yet to be established with complete confidence in marketing literature. Our study addresses this lacuna in the extant knowledge. It also amalgamates the constructs, relationship orientation and innovativeness, which have been found to mediate the association between market orientation and corporate performance. The study was based on data collected from B2B dyads, each dyad consisting of a seller firm and a buyer firm. Therefore we address the methodological gap of taking brand perception feedback from the customers of the firm rather than self-assessments from its own marketing personnel. Analyzing the data using Bayesian random effect models, we find that corporate brand performance of a firm is affected by market orientation but the mediating effect of innovativeness is a necessary condition for accomplishing that. This is important from a managerial viewpoint as well. Although the importance of corporate brands is well-understood, these findings will provide managers with a roadmap for planning and implementation of strategic marketing measures which enhance the strength of the corporate brand and steer it to higher performance levels.

2 - Competing on Sustainability: Sustainability Attributes and Their Effect on Performance

Omar Rodriguez-Vila, Assistant Professor of Marketing, Georgia Institute of Technology, Scheller College of Management, Atlanta, GA, United States of America, Omar.Rodriguez@scheller.gatech.edu, Sundar Bharadwaj

Sustainability is an area of increasing attention among practitioners and scholars. For the most part, the literature to date has investigated the effect of Corporate Social Responsibility on firm performance, but few studies have explored the effect of sustainability attributes, be it environmental or community benefits, on product level performance. In this study we first propose a taxonomy of sustainability attributes at the product level composed of the different types of benefit claims and benefit integration strategies used by firms. We then use the taxonomy to code over 2,500 new product introductions from 2005 to 2012 across 7 different product categories. This database is then use to study the effect of different types of sustainability attributes on product level performance, and the potential moderating effects of product market position and category characteristics. Our findings provide the first study into the nature of effects that sustainability benefits can have on brands and illustrates the important strategic role that the choice of sustainability attribute to integrate into a product offering can have on is market and financial performance.

3 - Configuring Marketing Capabilities for Superior Firm Performance in Different Business Contexts

Matti Jaakkola, Researcher, Aalto University School of Business, P.O. Box 21230, FI-00076 Aalto, Helsinki, 00100, Finland, matti.jaakkola@aalto.fi, Johanna Frösén

An impressive body of research has focused on marketing-related, organizational capabilities and their performance implications. While extant research has well addressed the relationship between individual marketing capabilities–related to, for instance, product development management, supply chain management, or customer relationship management–and business performance, combinative performance effects of these capabilities have received scant empirical attention. This constitutes a major limitation to our current understanding of the capability-performance relationship, as marketing capabilities have also been shown to result in synergistic performance outcomes. To address the gap, our study examines how different combinations of capabilities affect firm performance in different business contexts. Using fuzzy set qualitative comparative analysis, a novel approach to studying complex organizational configurations, we identify several parallel, high-performing configurations of business process capabilities associated with different types of firms and business environments. Our findings provide further support for the conceptual notion of complementarity in marketing capabilities, as well as suggest performance outcomes of the different capability configurations to be strongly context-dependent. Furthermore, we conclude that the causal mechanisms linking business process capabilities to firm performance are complex, and non-reducible to direct effects or two-way interactions identified by prior research. Given that firms have limited resources for developing their capabilities, this study also provides practical guidelines for firms with different characteristics and different business environments for better targeting investments in marketing capability development.

4 - What Doesn't Kill You Makes Your Brand Introduction Strategy Stronger: Why Firms Benefit from Adversity

Christine Moorman, Duke University, 100 Fuqua Drive, Durham, NC, 27708, United States of America, moorman@duke.edu, Stav Rosensweig, Vivian Yue Qin, Amir Grinstein

Firms face many types of adversity such as economic recession, competitive entry, and costly regulation. The literature however offers a set of mixed findings regarding how adversity affects firms. This paper offers one important reason for these varying findings–that it is necessary to account for firm survival as a separate event before testing for the consequences of adversity on firm performance. In so doing, we are able to demonstrate that 'what doesn't kill a firm, makes its brand introduction strategy stronger.' Specifically, we examine the impact of the Nutrition Labeling and Education Act on the survival and brand introduction rates of food firms relative to a control group of non-food firms that did not face the adversity of the NLEA. We first observe that small market-share food firms are not as likely to survive the NLEA as large market-share food firms. However, small market-share food firms that do survive introduce more new brands compared to large-share food firms. These findings support the idea that, if survived, adversity can improve firm performance over time.

■ TC06

06- Monterosa 1

New Frontiers in Consumer Heuristics

Cluster: Special Sessions

Invited Session

Chair: Joseph Goodman, Washington University in St. Louis, Campus Box 1133, One Brookings Dr., Saint Louis, MO, 63108, United States of America, goodman@wustl.edu

Co-Chair: Selin A. Malkoc, Assistant Professor of Marketing, Washington University in St. Louis, Olin Business School, Cb 1133, One Brookings Drive, St Louis, MO, 63130, United States of America, malkoc@wustl.edu

1 - Giving It the Benefit of the Doubt? When No-Review is a Good-Review

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Evaluating online products and retailers based on user reviewers has become commonplace. Indeed, both lay beliefs and academic research indicates that the absence of reviews is undesirable, casting doubt on the retailers' quality and decreasing purchase likelihood. Contrary to this supposition, in this paper we propose that when evaluating retailers with no reviews, consumers are surprisingly favourable. Based on the positivity-offset framework (Cacioppo & Brentson, 1994; 1999), we predict that when the consumption context is non-threatening and when there is no information (e.g., reviews), consumers tend to focus on positive aspects of a situation leading to high purchase likelihood. We test this prediction in four experiments. Experiment 1 (1a-1c) provides initial evidence by showing that consumers are more likely to buy a product from a retailer that has no reviews, compared to a retailer with average reviews. Furthermore, these studies show that when a retailer has no reviews, its evaluations is no different than when it has good reviews, and that these effects are not driven by motivated reasoning. Experiment 2 shows that consumers' potential expectations about market place survival (i.e., it would not have survived if it was not good) cannot account for our results. Experiment 3 demonstrates that in the absence of reviews, consumers produce a high percentage of positive thoughts and that this positive thinking is responsible for the high purchase likelihood. Finally, Experiment 4 increases the generalizability of our finding by demonstrating it in the context of an unfamiliar product and with real consumption behavior.

2 - One of Each: Variety Seeking to Avoid Choice Difficulty

Joseph Goodman, Washington University in St. Louis, Campus Box 1133, One Brookings Dr, Saint Louis, MO, 63108, United States of America, goodman@wustl.edu, Kathleen Vohs

Consumers seek variety for several reasons: satiation (McAlister, 1982), preference uncertainty (Kahn & Lehman, 1991), anticipated satiation (Simonson, 1990), different benefits (Huber & Reibstein, 1978), novelty (Raju, 1980), social pressure (Ratner & Kahn, 2002), uniqueness (Maimaran & Wheeler, 2008), and choice bracketing (Fox et al., 2006). Thus, variety seeking is often viewed as a utility maximizer, even though it is often over applied. But what if consumers sought variety as a decision minimizer to avoid making a decision? When consumers are faced with making difficult choices or making a choice with limited resources, they often defer or use heuristics to help in the decision process. We propose that consumers also use a variety-seeking heuristic to relieve such choice conflict and information load, and provide evidence that variety seeking increases when consumers' mental resources are limited. In our first study we show that consumers choose more variety when their resources are depleted compared to control using a standard ego depletion manipulation. In our second study we show that after consumers are faced with several decisions, such as in a grocery store, they chose more variety in the snacks that they consume. Further, we show that once they have consumed these snacks, and their mental resources have been replenished, their variety-seeking needs are diminished. The findings suggest that consumers use variety as a decision shortcut, and that consumers may need variety in contexts that can lead to mental resource depletion, such as a large grocery-shopping trips or complicated product customization decisions.

3 - The Effect of Product Shape Closure on Size Estimations, Preference and Consumption

Barbara E. Kahn, University of Pennsylvania, Philadelphia, PA, United States of America, kahn@wharton.upenn.edu, Julio C. Sevilla

Previous research has shown that consumers use physical characteristics of products, like their shape, to influence quantity perceptions, preferences and consumption quantity. The common explanation for these findings is that both perceptions and consumption decisions are influenced by faulty heuristic processing or consumption norms that can serve as a useful guide in some contexts, but that can distort decision making in others. We explore how a common psychological drive–the desire for closure–can serve as a robust determinant of how products are perceived. Specifically, we hypothesize that the need for closure that drives feelings of satisfaction in such diverse contexts as work and planning also applies to the physical closure. Our central thesis is that consumers believe a complete shaped item has more perceived quantity and is more preferred than an incomplete shaped item, holding actual quantity constant. We manipulate shape completeness by keeping the size of a product constant and by altering physical aspects of its design. We show evidence for our thesis through a field study and several lab studies. We find that the expectation that a complete shape corresponds to a single unit and an incomplete shape corresponds to less than a unit mediates the inferences about perceived quantity and that that the individual trait of need for cognitive closure moderates the effect. We also show that this expectation about the completeness of a shape is a stronger predictor for perceived quantity than other product-shape dimensions that have been previously established in the literature.

4 - The Willingness to Accept Automated Recommendations Based on Preferences of the Self and Preferences of Others

Donna L. Hoffman, University of California - Riverside, Riverside, CA, United States of America, donna.hoffman@ucr.edu, Randy Stein, Thomas P. Novak

Recommender systems, now commonplace among online retailers, use algorithms to determine how much a consumer might like a previously unconsidered item. Here, we explore how two different kinds of algorithms, those based either on: 1) a consumer's own prior preferences only, or 2) a consumer's own prior preferences and the preferences of other similar consumers, impact a consumer's beliefs in the accuracy of recommendations. Building on research suggesting that people generally consider their own insights to be more revealing and less biased than insights from others, we find that consumers are generally less willing to accept recommendations that incorporate the preferences of other consumers, compared to recommendations based only on their own preferences (Study 1). However, two additional studies show that simple framing manipulations that obscure the extent to which the group of other consumers might consist of discrete individuals–specifically, framing the group as a unified, singly acting entity (Study 2) or a nonspecific group of people (Study 3) - increase willingness to accept group-based recommendations. We theorize that this occurs because such manipulations facilitate seeing the group preference as less biased and more relevant to one's own preferences. These results suggest that online retailers need to carefully design how they present automated recommendations to consumers, especially when those recommendations are based on the preferences of others. Our results show that even trivial changes in framing can significantly alter how consumers evaluate such recommendations.

■ TC07

07- Monterosa 2

Marketing for the Greater Good

Contributed Session

Chair: Gauri Kulkarni, Assistant Professor of Marketing, Loyola University Maryland, 4501 North Charles Street, Baltimore, MD, 21210, United States of America, gmkulkarni@loyola.edu

1 - Memory Imperfections and Messaging Strategy

Raghunath Rao, The University of Texas at Austin, McCombs School of Business, Austin, TX, 78712, United States of America, Raghunath.Rao@Mccombs.utexas.edu, Om Narasimhan, Xiaolin Li

The increase in political advertising spending in recent years has been seemingly accompanied by an increase in the lament around the growing role played by "negative" advertising in influencing the outcomes of these races. Our key research is centered on the question that given certain budget, what determines the mix of positive and negative advertising for a candidate? What determines the inter-temporal pattern of this advertising, i.e., should a candidate mix positive and negative ads throughout, or show a preponderance of positive ads early on and negative ads later, or lead with negative ads and move to a positive message later? Our approach is to build a dynamic game-theoretical model of a political contest wherein two candidates endowed with initial budgets are facing an election at a future date with an electorate consisting of supporters, opponents and undecided voters with memory imperfections. First, we show that because of rehearsal and decay effects, ad spending gets concentrated later in the election cycle. Second, we show that neither candidate will invest solely in negative advertising throughout the election cycle. Third, when both candidates have low initial support (and symmetric budgets), the equilibrium involves both candidates investing only in positive messages. On the other hand, when both candidates have high initial support, the messaging strategy takes a 'pulsing' shape that involves an initial investment in negative ads followed by positive ads. The situation is different for the case of asymmetric budgets; there, a candidate with larger budget facing a candidate with high initial support is likely to respond with a messaging strategy bunched with negative content towards the end of the election cycle.

2 - Understanding Choice Behavior in Political Marketing Context: A Favorable Voter Response Model

Oguzhan Aygoren, Bogazici University, South Campus, Management Faculty, Istanbul, 34340, Turkey, oguzhan.aygoren@boun.edu.tr, Cengiz Yilmaz

Researchers suggest that identification, expectations, and perceptions are the strongest determinants of decision making in a voting situation. Research on voting behavior has examined these antecedents in a way that (1) causal relationships between these variables are omitted, (2) measures are context-specific, and (3) voting choice is the focal outcome variable. However, the authors argue that understanding voting choice behavior is also a viable strategy when these constructs are co-employed in a causal structural model, measures are redefined for generalization of the model, and other variables such as preference, loyalty, confidence, promoting and donating are also outcome variables. In these contexts, voting behavior may require different characteristics than those in previous research. The authors develop 'a favorable voter response model' which they posit is useful for explaining voting choice behavior. Results suggest that sociotropic and egocentric expectations together with character and capability dimensions of leader and party image exert significant effects on outcome variables of favorable voter responses while identity fit and ideology fit (constructs developed as an alternative to traditional party identification measures) partially mediate this relationship. Involvement levels and voter types are also entered into the analysis as moderators. The authors further develop and test the model in the context of 2011 general parliamentary elections in Turkey. The results provide support for the model and new avenues for further research. The study tries to build a comprehensive framework in understanding and modeling choice behavior in political marketing context by combining various constructs from both political science and consumer behavior literatures.

3 - Any News is Good News: The Impact of Enduring and Situational Involvement on Charitable Giving

J. Andrew Petersen, Assistant Professor of Marketing, University of North Carolina at Chapel Hill, 300 Kenan Center Drive, Campus Box 3490, Chapel Hill, NC, 27599, United States of America, Andrew_Petersen@unc.edu, Tarun Kushwaha

Research has shown that many nonprofits benefit greatly from positive news (e.g. Flutie Effect). Recently, though, there have been many cases of negative news (e.g. LiveStrong/Lance Armstrong and Penn State/Jerry Sandusky). Interestingly during the scandals these nonprofits reported near record high donation levels. This raises the question as to whether negative news actually has a negative effect on donor giving behavior, a key research question of this study. We use a contingency theory approach to develop a conceptual model which explains the relationship between enduring involvement (donor and time specific), situational involvement (positive and negative news shocks), and involvement responses (giving behavior). We empirically test this framework with 26 years of data from a major public university foundation and 26 years of news stories related to this university. As expected, we find that higher enduring involvement relates positively to involvement responses. We also find that situational involvement moderates the relationship between enduring involvement and involvement responses. Specifically, we find that when news is positive donors with high (low) enduring involvement give incrementally less (more) and when news is negative donors with high (low) enduring involvement give incrementally more (less). Additionally, we find that splitting the news events between those stories under the control of the university (e.g. academic scandals) versus guilt by association (e.g. alum misbehaves) add additional insights on how nonprofits can respond successfully to news events. The results of this study begin to provide nonprofits guidelines for responding to news events (whether positive or negative) to maximize overall giving behavior from their base.

4 - Reverse Use of Customer Data – Harnessing the Power of Customer Data for the Benefit of the Customer

Gauri Kulkarni, Assistant Professor of Marketing, Loyola University Maryland, 4501 North Charles Street, Baltimore, MD, 21210, United States of America, gmkulkarni@loyola.edu, Hannu Särijaarvi, P. K. Kannan, Hannu Kuusela

Traditionally customer data has been used to support a firm's value creation process by identifying the most profitable customers, segmenting them and/or generating cross-selling opportunities within the customer relationship management (CRM) framework. This approach to utilization of customer data is however firm-oriented and does not address the potential of using customer data for the benefit of the customer and for the support of the customer's value-creating process. Using a case study research setting in the context of Finnish food retailing, this study introduces the concept of reverse use of customer data by empirically exploring its value-creating opportunities for both the firm and its customers. It examines the shift in focus from the firm's internal use of customer data to external use and further to the way in which firms can provide their customers with information that can be used as an input to their value-creating processes. In the context of existing literature on CRM and Service-Dominant logic, the study builds a new approach to customer data usage by redefining and refining customer data from the customer perspective. The utility of this approach is then empirically tested using survey data from the case study context. For practitioners, this study unlocks the full potential of customer data by providing useful insights into understanding the possibilities of using customer data as a means to a more service-oriented value creation approach for their customers.

■ TC08

08- Edelweiss

Willingness to Pay

Contributed Session

Chair: Robert Wilken, ESCP Europe Business School Berlin, Heubnerweg 8-10, Berlin, 14059, Germany, rwilken@escpeurope.eu

1 - Are People Willing to Pay More for Social Goods? A Meta-Analysis

Russ Winer, Professor, New York University, 40 W.4th Street, New York, NY, 10012, United States of America, rwiner@stern.nyu.edu, Stephanie Tully

Many companies have made significant investments in socially responsible products. Environmentally safe cleaning products, fair trade coffee, and electric cars are just a few examples. While many public surveys show that people are willing to pay (WTP) more for such products, articles in the public press and recent sales results of some of the products have produced less optimism. Consistent with the popular survey results, many studies have found that consumers are willing to pay a relatively large premium for socially responsible products. In this paper, we conduct a meta-analysis of over 100 published and unpublished studies in a large number of product categories, across countries, and using different data collection methodologies to better understand this important marketing question. We use two dependent variables: the percentage difference people are willing to pay and the percentage of respondents from the study willing to pay a positive amount. Independent variables include product type, beneficiary of socially responsible behavior (environmental, human or animal rights), geographical location, whether the socially responsible behavior is externally certified, whether the study results are based on actual purchases (revealed preference), and a number of methodological variables. Some sample results are as follows. For the percentage WTP dependent variable, we find that the mean premium is 20.1% and that this percentage is lower for durables than non-durables, higher for goods where the behavior benefits humans (e.g., labor practices) than animals (e.g., bigger cages), higher for Europe and Australia and lower for South America and Asia relative to the U.S., and lower when the study uses real purchasing data than survey-based responses.

2 - Shades of Love: Effect of Ownership Type on Object Valuation

Charan Bagga, PhD Candidate, Western University, Ivey Business School, London, ON, N6A 3K7, Canada, cbagga.phd@ivey.ca, Neil Bendle, June Cotte

The endowment effect phenomenon and the ownership literature predict that owned objects are valued higher. Using a series of experiments, we demonstrate that object valuation is also dependent on the type of ownership. We conceptualize three variants of ownership, namely "complete ownership," in which an individual has title and possession of an object for an indefinite duration, "leasing," in which an individual has restricted title rights and possession for a limited duration and "borrowing," in which an individual has no title rights and only possession for a limited duration. We demonstrate that object valuation in a complete ownership state is the highest, followed by leasing. Object valuation in the borrowing state is the least among the three ownership types. Object valuation for all the three ownership variants is still higher than when an object is not possessed. We also establish the underlying mechanism of the phenomenon. We find that the effect of ownership type on object valuation is mediated by the level of psychological ownership associated with the specific ownership type. Further, we demonstrate that the level of psychological ownership for the three ownership types differ as the contributing routes of psychological ownership namely control, intimacy and self-investment operate differently for each ownership type. To conclude, we contribute to the endowment effect and ownership literature by demonstrating that object valuation is also dependent on the type of ownership.

3 - The Impact of Stress and Level of Construal on Willingness to Pay

Erik Maier, ESCP Europe Business School Berlin, Heubnerweg 8-10, Berlin, Germany, emaier@escpeurope.eu, Robert Wilken

This research investigates the impact of consumers' stress on their willingness to pay (WTP). Drawing on construal level theory, we propose that consumers' stress decreases their level of construal, which in turn deteriorates their evaluation of products. This effect is caused by a focus shift from product characteristics of high level of construal under relaxation, to characteristics of low level of construal under stress (study 1). This shift decreases the price consumers are willing to pay for a sample product under stress (study 2). Product category moderates the impact of stress on WTP: the decline in consumers' willingness to pay under stress is smaller for products of lower level of construal than for those of higher level of construal (study 3). This effect can be explained by an additional utility generated from a match between a consumer's and the product's construal level under stress. We extend existing research on the impact of relaxation on consumers' willingness to pay by (1) adding the stress dimension, (2) introducing a within-product perspective, and (3) proposing product category as a moderator.

4 - The Influence of Uncertainty on Willingness-to-Pay and Willingness-to-Pay Ranges

Robert Wilken, ESCP Europe Business School Berlin, Heubnerweg 8-10, Berlin, 14059, Germany, rwilken@escpeurope.eu, Erik Maier

This research investigates the impact of consumers' uncertainty on their willingness-to-pay (WTP) ranges. Extending still inconclusive empirical evidence (Dost & Wilken, 2012; Wang, Venkatesh, & Chatterjee, 2007), we propose that decreasing consumer uncertainty towards their preferences and towards product performance (1) increases their WTP, and (2) decreases the size of their WTP ranges. Three experiments, in which we use several measures of uncertainty and different research settings, provide convergent support for these propositions. Our results suggest that marketers can leverage consumers' WTP not only by increasing their preferences, but also by reducing their uncertainty regarding their own preference and product performance. Interestingly, increasing the number of product ratings, as a means to improve consumer certainty, makes consumers willing to pay more, irrespective of whether the rating average is positive or negative.

■ TC09

09- Mimosa

Advertising, Ethics and Culture

Contributed Session

Chair: Kim Serota, Visiting Professor of Marketing, Oakland University, School of Business Administration, Rochester, MI, 48309, United States of America, serota@oakland.edu

1 - Religious Orientation: How Do Religious Beliefs and Gender Influence What We Buy?

Sridhar Samu, Assistant Professor of Marketing, Indian School of Business, Gachibowli, Hyderabad, 500032, India, sridhar_samu@isb.edu, Melarkode G Parameswaran

This paper examines the religious orientation and gender of consumers and its impact on purchasing behavior. A survey (1067 consumers) followed by an experimental study is used to test the hypotheses. Regression analyses showed a strong impact of the three religious dimensions on the five purchase dimensions. Of the fifteen possible coefficients, nine were significant and in the right direction, confirming the impact of religious factors on the purchase process. The experimental study had 311 students. Religiosity was manipulated and gender was measured. ANOVA was used to test for the main effects and interaction. 7 out of 8 main effects for religiosity and 2 out of 8 for gender were significant. The interaction between religiosity and gender was significant for 4 of the 8 factors, with religious men having significantly higher values as compared to the other groups. The strong results indicate that the consumer's strength of religious beliefs and gender have a strong impact on their purchase process. This is an important finding for as this will allow marketers to understand how religious appeals may be used while directing communication to their target market, especially men. Men with stronger religious beliefs are more likely to respond positively to product and religious activities than women, and consumers with weaker religious beliefs. Future research plans are to focus on the specific religious appeals and their timing and to study its impact on attitude and consumption behavior of consumers following different religions. Advertisements that use some of these are quite prevalent in the market place, but a detailed study that considers all these factors will give a richer understanding of the process and outcomes.

2 - Marketing of Halal Food and Shopper Behavior in Germany: An Empirical Case Study on Ethnic Marketing

Volker Trauzettel, Professor, Hochschule Pforzheim University, Tiefenbronner Str. 65, Pforzheim, 75175, Germany, volker.trauzettel@hs-pforzheim.de

Retailers face changing marketplaces. In Germany, some of the large retailers have recognized that they missed the chances to adapt their offerings to the demands of the muslimic part of the population that rised by the growing number of immigrants in the last decades. However, the assortments of the traditional retailers as well as their communication and sales processes does not reflect the muslimic consumer. The purpose of this study is to research on muslimic consumer's perception on supermarkets offering of Halal food. The empirical results are presented and conclusions are drawn.

3 - Truth Bias and the Detection of Marketing Deception

Kim Serota, Visiting Professor of Marketing, Oakland University, School of Business Administration, Rochester, MI, 48309, United States of America, serota@oakland.edu, Timothy Levine

Most research on deceptive marketing occurs at the intersection of behavioral and legal theory, with the intent to inform regulatory processes and improve marketing practices. There is considerable research on the nature and identification of deceptive advertising, individual differences in message processing, and material injury resulting from marketing deception, but the literature is void of effort to assess whether or not individual consumers can distinguish deceptive from truthful messages. In fact, the subject has been dismissed as irrelevant, with the argument that a consumer who perceives a deception has not been deceived. But the presumption in this view is that some consumers can detect deception while others cannot. This paper argues that the relationship between actual message veracity and consumer judgment of truthfulness or falsity is highly relevant to purchasing outcomes and contextual cues are key moderators of these judgments. An experiment (N = 1,507) assessed the accuracy of judging 96 advertising claims. Direct judgments (rather than normative or salient belief techniques) were used to obtain subject-level data. A three-factor design examined the influence of branding, perceived ability to verify (using search, experience, and credence claims), and base-rate (proportion of truthful claims in a set) on judgment accuracy. Results suggest content and actual veracity of individual claims has limited impact on judgment accuracy. However truth bias, the consumer's tendency to believe or not believe claims, is an important determinant, which is moderated by situational cues that increase or reduce trust and make the consumer more or less susceptible to deceptive marketing practices.

■ TC10

10- EMBA 1

Brand Depth and Brand Crisis

Contributed Session

Chair: Yuxuan Zhang, Hong Kong University of Science and Technology, Clearwater Bay, Hong Kong, Hong Kong - PRC, swirlzhang@ust.hk

1 - Understanding the Strategic Implications of Brand Depth and Breadth

John Roberts, Professor, London Business School, Regents Park, London, NW1 4SA, United Kingdom, jhroberts@london.edu, Pam Morrison, Songting Dong

Brands are important market based assets and we have good tools to calibrate brand equity. However, while it is now de rigueur to understand the heterogeneity of tastes when modeling consumer behavior, relatively little effort has been devoted to understand the distribution of brand strength across the population and its implications for brand strategy. We examine two of brand strength dimensions, depth and breadth, using a hierarchy of effects model and fit it to data. By understanding the distribution of perceptions in the population, together with the distribution of different importance weights at various stage of the decision process, we can assess a brand's vulnerability and clout.

2 - The Role of Brands in Extended Service Contract (ESC) Purchase Decisions

Moein Khanlari Larimi, University of Alberta, 3-23 Business Building, Edmonton, AB, Canada, khanlari@ualberta.ca, Paul R. Messinger

Purchasing extended service contracts (ESCs) offered alongside durable products insures buyers against product failure beyond manufacturers' warranty coverage. In an attempt to advance our understanding of factors that influence ESC purchase decisions, we use the ISMS durable dataset (I) to explore the role of brands in the purchase of ESCs. Experience with branded products can affect perceptions of product failure rates for those brands. We find that both prior within-category and prior cross-category experience with brands decrease the likelihood of purchasing ESCs for those brands in subsequent purchase occasions. Our results provide further empirical evidence for the effectiveness of umbrella branding in consumer risk reduction and the transference of perceptions of product quality. Retail stores can counteract the negative effect of brands by persuading buyers to buy ESCs through push strategies and price adjustments which may not be directly observable in panel data. Our analysis provides evidence for the significant role of retail stores in positively affecting ESC purchase decisions.

3 - Brand Equity as a Mediator of the Corporate Social Performance – Corporate Brand Performance Link

Nima Mehrafshan, University of Hamburg, Welckerstr. 8, Hamburg, 20354, Germany, nima.mehrafshan@wiso.uni-hamburg.de, Alexander Permann, Mark Heitmann

Brand management is increasingly facing challenges due to customer reactions to the abundant information on firms' ethical behaviors. We analyze the role of customer based brand equity in the relationship between actual internal and external corporate social performance (CSP) on brand demand and sales revenues. We combine three firm level data sets on CSP, customer based brand equity and accounting variables covering 198 companies over a period of up to fifteen years. While we observe no impact of CSP strengths, CSP concerns diminish demand. Furthermore, this relationship is fully explained by customer based brand equity. Specifically, poor internal CSP, e.g., corporate governance or employee concerns diminish the brand equity dimensions brand esteem/relevance and brand knowledge. Brand esteem/relevance in turn mediates the link between CSP and brand demand as well as sales revenues. The results have implications for managing CSP and its impact on brand demand.

4 - Study of the Heterogeneous Impact of Product-Harm Events on Brand Equity: Findings and Implications

Yuxuan Zhang, Hong Kong University of Science and Technology, Clearwater Bay, Hong Kong, Hong Kong - PRC, swirlzhang@ust.hk, Kristiaan Helsen

Though the market response to a product-harm crisis and product-harm rumors has widely been documented, several interesting questions for both scholars and brand managers still remain: (1) What lies behind the differential impact of crisis or rumor on different brands? (2) What explains the difference of the impact of crisis or rumor on different products under the same umbrella brand (e.g., across different price points)? (3) To what extent does the market response to a crisis and to a rumor within the same category vary and what could explain such differences? We apply the dynamic linear model with stochastic variation to a Nielsen dataset on Infant Milk Formula (IMF) category including sales and store environment data for all hypermarkets in Shanghai (China). During the 2-year period covered by the data, two incidents took place: the melamine crisis in September 2008 and a rumor about scores of well-known foreign brands being melamine-tainted in early 2009. We address the questions mentioned above and examine how those differences can be explained by consumers' relying on different information sources to infer products' quality after a product-harm crisis or a product-harm rumor. We obtain several findings: (1) A product-harm crisis and a product-harm rumor can differ not only in terms of the degree of impact, but what is more important, in terms of different information cues signaling products' quality that consumers would rely on; (2) The information cues that signal products' quality (e.g., brand equity, publicity) explain the differential impact of crisis or rumor on different brands; (3) Those information cues (e.g., price, product package) also explain the differential impact of crisis or rumor on different products under the same umbrella brand.

5- An Investigation of Consumer Responses to Global Brand Crisis

Lianxi Zhou, Professor, Brock University, 500 Glenridge Avenue, St. Catherines, ON, Canada, lzhou@brocku.ca, Alain D'Astous

Brand crises usually give rise to a great deal of negative publicity that attracts the attention of consumers and impacts on the reputation of the blamed firm. Therefore, in addition to the enormous direct costs associated with managing the situation, firms affected by brand crises suffer from important financial losses caused by a decrease in sales and a possible dilution of their brand equity. Unfortunately, brand crises are becoming more frequent given the multiplication of risks that firms have to face (Birch, 1994; Dean, 2004; Klein and Dawar, 2004). The ever increasing complexity of products aimed at satisfying more and more demanding consumers, the pressure toward manufacturing products at the lowest cost, and the tightening of standards and legal constraints as regards product security are all factors that contribute to create a business environment conducive to the occurrence of such crises. Given the significant negative consequences for firms that are engendered by global brand crises, it is important to understand consumers' reactions in order to develop efficient crisis-management tools that firms implicated in these incidents can use. The objective of this research is therefore to understand the reactions of consumers as regards three major crises involving brands, namely the recall of Mattel's toys, that of Maple Leaf's meat products, and that of Toyota's vehicles. These recent highly mediatised brand crises are used as research context to generate research findings relevant for global brand crises in general. A set of research hypotheses are developed and tested by a survey design with data collected in Canada. Research implications are discussed within the context of marketing communications for managing global brand crisis.

■ TC11

11- EMBA 2

Customer Loyalty

Contributed Session

Chair: Sudhir Voleti, Assistant Professor, Indian School of Business, 2118 AC2, ISB Campus Gachibowli, Hyderabad, 500032, India, Sudhir_Voleti@isb.edu

1 - Loyalty Programs: Reward or Rip-Off?

Peter Danaher, Professor, Monash University, Dept of Marketing, Caulfield, Melbourne, VI, 3145, Australia, peter.danaher@monash.edu, Laszlo Sajtos

The popular press and consumer groups are vocal critics of the value of many loyalty programs. They argue that consumers have to spend a relatively large amount at a retailer to receive even a modest reward; hence the value of a single point is insignificant. However, since the vast majority of a firm's loyalty program members are already frequent customers, loyalty points accrued can be viewed as a bonus for a business transaction that was going to occur anyway. In this case, a more pertinent question is whether customers are fairly rewarded for participating in loyalty programs. One way to gauge this is to compare the price of a product 'purchased' from a loyalty program catalog using loyalty points with the cost of the same product on the open market. This empirical analysis can help reveal whether consumers, in fact, receive economic benefits by remaining loyal to the same retailer or whether they are better off to 'shop around.' By using four loyalty programs across two countries, this study finds large differences across these programs, with consumers generally only benefiting when redeeming points for high-priced items.

2 - New Insights on the Relationship between Customer Satisfaction and Loyalty

Nadine Schirmer, Ludwig-Maximilians-University, Institute for Market-Based Management, Geschwister-Scholl-Platz 1, Munich, 80539, Germany, schirmer@bwl.lmu.de, Christian Ringle

The relationship between customer satisfaction and loyalty is of key interest for both researchers and practitioners. In this context, prior research has shown that trust and commitment are important mediators of this relationship. Yet, empirical results sizably differ. To some extent, these differences may be due to the existence of different customer segments that entail distinctive outcomes for these relationships, which have not been appropriately accounted for in past research. Neglecting this heterogeneity among customers may result in invalid outcomes. An integrative model was developed for this relationship which includes its explanatory sources of competitive advantage as well as commitment and trust as mediators for the relationship between satisfaction and loyalty. To empirically validate and substantiate the theoretically derived model, we used the partial least squares structural equation modeling (PLS-SEM) method and industry specific survey data in the context of petrol retailing to estimate the relationships. Further, we analyzed whether the relationship between customer satisfaction and loyalty is rather non-linear than linear as typically assumed. This was tested in the general model as well as in the mediator model containing commitment and trust. Finally, we addressed the critical issue of heterogeneity by drawing on a priori knowledge for conducting PLS multigroup analyses (PLS-MGA). The results revealed significant differences in the customer relationships for branded and non-branded petrol retailers, business and leisure patrons as well as for regulars and non regulars. In addition, we employed finite mixture PLS path modeling (FIMIX-PLS) to uncover unobserved heterogeneity across and within these groups.

3 - Present Loyalty: Theory and a Behavior-Based Measurement Method

Songting Dong, Senior Lecturer, Australian National University, RSM, LF Crisp Bldg 26, Canberra, 0200, Australia, songting.dong@anu.edu.au, Ping Zhao, Deqiang Zou, Min Ding

The existing loyalty literature does not clearly define loyalty on the time dimension. We propose that, differentiating present loyalty from future loyalty leads to a less biased and more accurate measure of customers' loyalty, and improves the ability of predicting their future loyalty behaviors. We propose a framework of present loyalty and a method, repurchase acceleration, to provide a behavior-based measurement for present loyalty. The behavioral present loyalty measure is compared with widely adopted intentional future loyalty measures both in theory and in an empirical study. The empirical study demonstrates that the intentional future loyalty measures have a weak predictive power even for the near future repurchase decisions. Comparatively, the behavioral present loyalty measure obtains a hit rate of as high as 96.3% and captures more than twice the amount of information that is captured by the best intention models.

4 - Predicting Customer Value and e-Channel Disposition from Cross-Sectional Survey Data

Sudhir Voleti, Assistant Professor, Indian School of Business, 2118 AC2, ISB Campus Gachibowli, Hyderabad, 500032, India, Sudhir_Voleti@isb.edu, Sundar Bharadwaj

A customer's value to a firm depends a lot on the customer's loyalty to the firm, controlling for demographic and environmental factors. We investigate to what extent the attitudinal determinants of self-reported customer loyalty to the firm help predict (i) self-reported and transaction-based customer value to the firm, and (ii) self-reported disposition towards the electronic channel for transacting with the firm. We use data from a 2001 cross-sectional survey of the users of online banking for a US credit union. Cross-sectional data in surveys offer little in terms of information or degrees of freedom to estimate heterogeneous customer response parameters. We propose and demonstrate the application of a Bayesian Semiparametric approach to estimate individual-level customer response parameters. We segment the bank's clientele using estimates of individual-level attitudinal determinants of customer loyalty. We validate the segmentation by using actual transactions data to test for significant segment-specific differences in customer value to the bank and customer disposition to the online banking channel. We find that our method outperforms benchmark approaches in yielding well-identified segments of customers with differential value and online banking disposition to the bank.

■ TC12

12- Geneve

Meet the Editors I

Contributed Session

1 - Meet the Editors

Editors of leading journals for marketing academics will present their editorial policies and perspectives.

The following editors are represented: Marketing Science: Preyas Desai; Journal of Marketing Research: Bob Meyer; Journal of Marketing: Jeff Inman; Journal of Consumer Research: Brian Ratchford; Management Science: Kannan Srinivasan.

■ TC13

13- Luzern

Advertising and Price Sensitivity

Contributed Session

Chair: Shuba Srinivasan, Professor, Boston University, 595 Commonwealth Avenue, Boston, MA, 02215, United States of America, ssrini@bu.edu

1 - Price Advertising Offline Products with Online Competition

Ying Xiao, CKGSB, 1 East Changan Ave, Beijing, China, xiaoying@ckgsb.edu.cn, Bing Jing

We study an offline store's decision to price advertise facing competition from an online store which sells the same product. All consumers can purchase the product from online but are uncertain of their product valuation unless they incur a search cost to visit the physical store. We find that the presence of an online store does not necessarily raise the offline store's incentive to conduct price advertising due to the increased price competition when the search cost is high, and the online store can be worse off when it becomes more costly to visit an offline store. The offline store's incentive to advertise price also depends on the distribution of consumer evaluation.

2 - Allocating Spend on Digital Display Advertising: Investigating Attributable ROI

Nazrul I. Shaikh, Assistant Professor, University of Miami, Coral Gables, FL, 33146, United States of America, n.shaikh@miami.edu, Niva Shrestha, Mahima Hada

With consumers increasingly consuming media digitally, manufacturing and media firms have made some structural changes to their marketing mix allocation. Firms have increased spend on digital media by 13.5% over the last year, and specifically on pre-roll advertising. We investigate the effectiveness of this change in media spending. We present findings from analyzing firm's media spend over two years in two distinct industries - service and consumer products. Using detailed weekly transactional data combined with information on all the multimedia (both online and offline) communications used by a firm, we estimate the efficacy of digital display advertisements in driving customer traffic and sales. We find that while digital display media can provide high return of investment, the faster saturation rates of digital display media suggests lower spend ceilings. For a marketer, the implications of our findings are two folds: first, the high retention rate and early saturation demands customized media plans which are different from static banner ads; second, the message conveyed through pre-roll advertisements, when supported by appropriate key word selections (for paid search) has additional synergistic effects. As such, our findings can help marketers to identify the optimal levels of execution and mix of pre-roll advertising within their overall online advertising and thereby improve online effectiveness and ROI.

3 - Advertising's Impact on Price Sensitivity: How Do the Brand's Mindset Metrics Matter?

Shuba Srinivasan, Professor, Boston University, 595 Commonwealth Avenue, Boston, MA, 02215, United States of America, ssrini@bu.edu, Berk Ataman, Koen Pauwels, Marc Vanheule

Marketing managers know that advertising is an important brand builder with stronger brands commanding price premiums with lower price sensitivity. Experiments show opposing effects: ads lower sensitivity through preference, but increase it through consideration set. Yet critical brand-level questions remain answered. How do ads change a brand's price sensitivity and customer mindset metrics of awareness, consideration, and liking depending on the brand's price/quality positioning and the characteristics of the category? If a brand's price sensitivity can be influenced by advertising, can it also be influenced by its competitors' advertising, and if so, by how much? Our goal is to answer these questions by linking advertising to price sensitivity through customer mindset metrics. To this end, we specify a Hierarchical Dynamic Linear Model which accommodates the dynamic dependencies among price sensitivity and customer mindset metrics, and allows us to quantify the impact of advertising while controlling for the effects of promotions, product line length, and distribution. We estimate this model using seven years of sales, marketing mix, and customer mindset metrics data for brands in 33 product categories. Our preliminary findings suggest that own advertising lowers price sensitivity of an average brand, while competitive advertising has no impact on price sensitivity. Own advertising effect for value brands is 1.3 x higher versus average brands and 6 x higher versus premium brands (ceiling effect). Overall, managers need to proactively measure and track own and competitive advertising effects on consumer response to maximize brand performance.

4 - The Whole-Number Processing Bias: Investor Sentiments and Changing Stock Prices

Ashwin Malshe, Professor, ESSEC Business School, 00 Victoria St, NLB #13-02, Singapore, 188064, Singapore, malshe@essec.edu, Subimal Chatterjee

Consumers often use an additive model to evaluate multiple percentage information. For example, in laboratory studies, consumers mistakenly think that a 50% rise in price followed by a 50% drop will bring the price back to the original level (rather than 25% below the original level). This apparent whole-number predisposition, or the tendency to add positive and negative percentage information without considering the different base numbers, is a widespread bias in consumer information processing. However, as the laboratory studies testing this bias provide the percentage information simultaneously, they do not mimic "real" changes (e.g., stock prices that go up/down weekly, quarterly, yearly, etc.). This research, therefore, aims to generalize the laboratory findings to the broader marketplace where gains/losses occur in a sequence. For example, would a 50% drop in stock prices in one quarter followed by a 50% rise in the next bring consumer optimism back to its original level (as predicted by the additive model), or keep the optimism depressed by 25%. Our data spans 1,270 weekly observations (July 1987 to November 2011) and consists of (1) investor sentiment index (percent bullish, bearish, or neutral), (2) S&P 500 stock returns, (3) recession dummy indicators, (4) US monthly production index, and (5) monthly indices on durable goods, non-durable goods, and services. We find that changes in adjusted investor sentiments (after controlling for the effects of various macroeconomic variables), following changes in stock market returns, mimic the naive additive process as long as we can account for recency effects (if the gain/loss occurs last) and adjust for loss-aversion (i.e., recent losses loom larger than recent gains).

■ TC14

14- Zurich

Sustainable Innovation

Contributed Session

Chair: Hossein Eslami, PhD Student, NUS Business School, Mochtar Riady Building, Level 8, 15 Kent Ridge, Singapore, 133028, Singapore, hossein_ed@nus.edu.sg

1 - Sustainability Orientation: Drivers and Innovation and Performance Outcomes

Rosanna Garcia, Associate Professor, Northeastern University, DíAmore-McKim College of Business, Boston, MA, United States of America, r.garcia@neu.edu, Scott Dacko, Marius Claudy, Sarah Wilner

Increasingly, many organizations are embracing a sustainable way of doing business as a path to greater profitability and a means of reducing harm to people and the environment. One way organizations respond to this imperative is through the development of new, more sustainable products and services. Sustainable innovation allows companies to enter new markets and target increasingly eco-conscious consumers, while new processes or re-designed products also can help save costs by reducing materials or waste. Overall, sustainable innovativeness can be an important vehicle to reconfigure the whole system by which organizations create value and deliver to value customers (Reinhard, 2000). However, little is known about the role of such a 'sustainability orientation' in the innovation process. This study aims to address this knowledge gap by forming a better understanding of (i) how companies build a sustainability orientation; (ii) how this orientation drives sustainable product and service innovations; and (iii) the impact of these innovations creating more value with less. In the exploratory study reported here, we draw on interviews with mid- and top-level managers in nine companies located in the US, Ireland and the UK to aid in the development of a preliminary framework. We emphasize both product and service innovation because to date, innovativeness in the context of sustainability has been researched predominantly in product innovation (Garcia and Calantone, 2002) and is often linked to the idea of eco-efficiency (Brezet, 1997), which broadly refers to product improvements (e.g. using less environmentally harmful materials) and/or product redesign (e.g., design for recyclability).

2 - Cultural Influences on the Usage of Reusable Products: A Cross-Country Analysis

Myung-Soo Jo, Associate Professor, McGill University, 1001 Sherbrooke Street West, Montreal, PQ, H3A1G5, Canada, myung-soo.jo@mcgill.ca, Rong Huang, Emine Sarigollu

This study examines how the usage of reusable products differs across countries varying on several cultural dimensions. The study develops hypotheses based on cultural dimensions such as femininity/masculinity, locus of control, long term orientation, and collectivism/individualism. The hypotheses are tested on four most commonly used reusable products: coffee mug, drinking bottle, shopping bag, and paper. Two Western (Canada and the US) and two Eastern countries (China and Korea), based on differences on the cultural dimensions, are selected for the study. It is hypothesized that people in individualistic countries are more affected by their own environmental consciousness, whereas those in collective countries are more influenced by their peers. In terms of locus control, people who strongly believe they have control over their destiny and future are more likely to use reusable products than those who believe less in the control. For the influence of time orientation, this study proposes that, given similar economic standing, those who are more long-term oriented use more reusable products than those who are less long-term oriented. Regarding the femininity/masculinity value, people in countries which show more femininity are more likely to use reusable products than those in countries which show more masculinity. Besides the underlying cultural characteristics, this study also examines how the usage of reusable products is affected by various other factors such as convenience, saving money, and genuine concern for the environment. Moreover, this study investigates how strongly materialistic values permeate each country and how materialism can be manipulated to implement effective financial incentives. Implications of the findings, particularly those for improving use of reusable products for each country that differ on cultural dimensions, are discussed.

3 - Social Responsibility and Product Innovation

Ganesh Iyer, University of California-Berkeley, Haas School of Business, Berkeley, CA, United States of America, giyer@haas.berkeley.edu, David Soberman

Consumers in many markets care about products that are perceived to be socially responsible or environmentally friendly. We examine the incentives of firms to invest in product innovations that respond to the social responsibility concerns of consumers and connect the existence of markets for socially responsible innovations to the interplay of altruistic versus social interactions concerns. Consumers have an altruistic preference for social responsibility and they incur an intrinsic cost for consuming a product which is socially/environmentally unfriendly. We assume that consumers are heterogeneous in their intrinsic altruistic costs. Consumers also have social comparison concerns which are endogenous to their market interaction. This can be seen as endogenizing in a market setting the impure altruism motives of warm glow and cold prickle that have been highlighted in the context of charitable giving by Andreoni (1990). Consumers enjoy a social warm glow benefit if they purchase a socially responsible product and meet someone with a socially damaging product. Conversely, they face the social cost (cold prickle) of meeting someone who possesses a socially responsible product if they are consuming a socially damaging product. In a competitive market we show that the cold prickle rather than the warm glow determines the incentive to innovate when the value of the innovation is not very high and when there is significant heterogeneity in the intrinsic cost of consuming the product in the market. The innovation incentives are affected by the warm glow effect only if the damage caused by the product is sufficiently large, whereas the innovation incentives are solely determined by the cold prickle effect in markets where the damage is sufficiently small.

4 - Structural Model of New Technology Adoption with Uncertain Payoff: The Case of Solar Panels

Hossein Eslami, PhD Student, NUS Business School, Mochtar Riady Building, Level 8, 15 Kent Ridge, Singapore, 133028, Singapore, hossein_ed@nus.edu.sg, Trichy Krishnan, Surendra Rajiv

Marketing researchers have long been interested to model the diffusion of new technologies to understand why different consumers adopt at different points in time. However, modeling the underlying learning mechanism to adopt the new technology with uncertain payoff is an ongoing research field. In this paper we propose a micro model to capture the dynamics of adoption process accounting for payoff uncertainty and learning. We calibrate the model using an individual level data on solar panels adoptions where the adoption decision is visible to others. The results of the study would have implications for renewable energy policy makers.

Thursday, 3:30pm - 5:00pm

■ TD01

01- Montreux

Customer Base Analysis

Cluster: Internet and Interactive Marketing

Invited Session

Chair: Shanfei Feng, Monash University, Department of Marketing, P.O. Box 197, Caulfield East, VIC, 3145, Australia, shanfei.feng@monash.edu

1 - Since You Have Been Gone - Customers Win-Back

Ann-Christin Langmaack, University of Hamburg, Welckerstraße 8, Hamburg, 20354, Germany, ann-christin.langmaack@uni-hamburg.de, Michel Clement, Edlira Shehu

In an increasingly competitive market customer win-back becomes highly relevant for managers of nonprofit organizations (e.g., Blood Donation Services of the German Red Cross). Especially the optimization of direct donor contact (e.g., by mailings) has high managerial relevance for nonprofit services. In this context it is important to take the psychological phenomenon of licensing into account. Since reminding people of their past donations may license them to not donate again. We address this by a large field experiment using a representative sample of 19,000 donors who were inactive for at least 24 months. In a 1x3 experimental design, we focus on optimization of direct marketing mailings with respect to the emotional and personal appeal for the respondents ("you have saved a life," "you could save a life," and "blood cannot be produced artificially") to reactivate inactive donors. In particular, we refer to the exact date and location of the donation usage. We build on the theory of planned behavior and control for blood donation motives. Empirical findings show that our experimental treatments differ significantly with respect to win-back success (i.e., whether/how often a participant donated after the mailing). Against the theory of licensing we find that the emotional letter focusing on past donation ('you saved a life') leads to highest reactivation success.

2 - Customer Base Analysis in Social Networks: A Structural Model

Xi Chen, PhD Candidate, Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong - PRC, chenxinh@ust.hk, Ralf van der Lans, Michael Trusov

With the growth of social networking websites and information technology, social interaction between customers has increased rapidly in recent decades. This has important implications for assessing the value of individual customers. Customers not only contribute directly to firm's profits by purchasing products or services, but also indirectly through peer influence. In this paper, we developed a novel measure to value customers based on a structural choice model with social interactions on networks. We derived the Bayesian Nash equilibrium of a game with incomplete information defined by the model. This equilibrium leads to a new measure capturing both direct and indirect customer value. We applied the proposed model to determine the value of users in an online social networking website. For model estimation, we developed a stochastic Bayesian MCMC procedure to accommodate large sample sizes typical in online social network analysis. Our results confirm that the value of a customer consists of direct and indirect sources. Follow-up counterfactual analyses show that our proposed measure captures the value of customers more accurately compared to traditional measures that focus on only one source.

3 - An Empirical Investigation of Interaction between Vertically Differentiated Channels: Case of Factory Outlet Stores and Retail Stores

Gonca Soysal, University of Texas-Dallas, 800 W Campbell Rd, Richardson, TX, 75080, United States of America, gonca.soysal@utdallas.edu

In the recent years it has been common practice for retailers to use factory outlet stores as a means to achieve market expansion and price discrimination. Many retailers design and produce products solely for the outlet stores and offer lower quality products at lower prices through this channel. Through this vertically differentiated channel offering, the retailers aim to attract value conscious customers who would otherwise not shop with the company while continuing to serve higher valuation customers through the traditional retail store channel. The alternative channel is offered under the same brand name (as a brand extension) to exploit the equity of the well-known brand. However, there are two main concerns for retailers implementing this strategy regarding cross channel interaction. Cannibalization of retail store sales and the impact of the experience with the lower end channel on the behavior of multi-channel consumers. Previous research on brand extensions suggests that multichannel consumers' experience with the outlet channel (vertical brand extension) might be detrimental for the retail channel due to brand dilution. Using customer level transaction data from an apparel retailer we investigate the behavior of multi-channel consumers through the factory outlet channel and the retail store channel. We find that on average adoption of the factory outlet channel increases consumers' spending with the retailer by increasing purchase frequency. When we look across pre-outlet annual spending distribution, we find some evidence of cannibalization on the high-end of the distribution, but as we move down, the overall impact of adoption on spending is positive. The outlet channel is successful in capturing incremental business from customers who would otherwise not buy much from the regular store channel.

4 - Get Lapsed Donors Back: Assessing Marketing Effectiveness in Post-Termination Stage

Shanfei Feng, Monash University, Department of Marketing, P.O. Box 197, Caulfield East, VIC, 3145, Australia, shanfei.feng@monash.edu

Not-for-profit organizations invest heavily on relationship management with their donors. One of their major concerns is to motivate lapsed donors to give again. Although the organizations spend lots of marketing efforts contacting these lapsed donors, it was not clear whether these marketing communications were effective or not considering the relatively low return rate. In this study I try to examine this effect using data from a large not-for-profit firm in South East Asia. The firm has a regular donation program in which various donors subscribe to the organization and commit to donating certain amount of money periodically. However, the organization did see many donors drop out of the program. The organization invests in various marketing efforts (usually using solicitation mailers and other direct communications) to attract them back to the program. I examine the following research questions: Are there any differences between donors who return to the organization vs. who do not? How long does it take to reactivate a lapsed donor? And, in the end, are the direct marketing communications playing a significant role? The paper applies a proportional hazard model to answer these questions. Interestingly, it's found that the marketing communications did have a positive influence on reactivating lapsed donors, but in a non-linear way. In another word, too many communications may result in negative effect. The paper draws meaningful implications to managers in not-for-profit industry.

■ TD02

02- Lausanne

User-Generated Content - III

Cluster: Internet and Interactive Marketing

Invited Session

Chair: Daniela Baum, Ludwig-Maximilians-Universität (LMU), Munich School of Management, Geschwister-Scholl-Platz 1, München, 80539, Germany, baum@bwl.lmu.de

1 - Using UGC Traffic for PGC Monetization

Inyoung Chae, PhD Candidate, INSEAD, Boulevard de Constance, Fontainebleau, France, inyoung.chae@insead.edu, Paddy Padmanabhan, Theodoros Evgeniou, Kaifu Zhang

Due to the proliferating content generation trend among online users, many websites have embraced online platforms to publish user-generated content (UGC). These UGC sections allow consumers to voluntarily engage on the websites and generate tremendous amounts of content at almost no cost to them, but that raises questions of how the platform provider can derive monetary value from the UGC sections. This is particularly ironic for those online content providers whose major revenue source comes from advertisements posted on their professionally-generated content (PGC) sections, as advertisers are often reluctant to advertise in UGC sections due to uncertainty about the content quality. If hosting UGC sections does not contribute to an online-based firm's revenue much, and instead, potentially scares away PGC users, it may be advisable to dispose of the UGC sections altogether and focus solely on the PGC sections. Investigating a large, online portal that hosts both PGC and UGC content, we argue that a firm can deliberately affect the synergetic effects of both types of content by maximizing the role of UGC to attain and retain users and then transit them to the PGC sections. We model an individual's sequential decisions including whether to visit the website from PGC or UGC sections, to shift to the other section, and eventually how much PGC content to consume, and investigate what affects these consecutive decisions. Results show the effects of various types of UGC content (e.g., forums, blogs, and albums) and their characteristics on different decision stages. We also show the different effects of two types of content to shift the bouncers, who proportionally account for more than half of the entire population of users compared to the multiple-time visitors.

2 - Managing the Crowd: Prize Structure and Creativity in Online Idea Generation Contests

Johanna Slot, PhD Candidate, Tilburg University, Warandelaan 2, Room K1028, Tilburg, 5037AB, Netherlands, j.h.slot@tilburguniversity.edu, Raji Srinivasan, Stefan Wuyts

With the emergence of Web 2.0 technologies, online idea generation contests are growing in popularity. We examine the effect of the prize structure of online contests on the creativity of idea generation. We develop hypotheses relating the total prize value, number of prizes, and the variance of the prizes (prize spread) to the creativity of ideas generated in the contests. We test the hypotheses using data on 106 online idea generation contests and find that total prize value and number of prizes increase idea creativity, while prize spread decreases idea creativity. Furthermore, the effects of prize structure characteristics on idea creativity are interdependent. Contest sponsors who are unable to offer a high total prize value can increase idea creativity by having many prizes of low value. Contest sponsors should strive to set prizes of equal value as prize spread decreases idea creativity, especially for contests with few prizes.

3 - Investigating the Interplay between Online Consumer Reviews and Recommender Systems

Daniela Baum, Ludwig-Maximilians-Universität (LMU), Munich School of Management, Geschwister-Scholl-Platz 1, München, 80539, Germany, baum@bwl.lmu.de, Martin Spann

Online consumers face various difficulties in their purchase decision making. Due to the huge selection of products and the vast amount of information available, making the right decision and finding the product that fits customers' needs best may be challenging. Online retailers and website providers therefore try to support potential customers in their decision making by providing recommendations generated by former consumers as well as recommendations generated by recommender systems. Previous research already analyzed the impact of online consumer reviews on consumer behavior as well as the influence of provider generated recommendations. The goal of this study is to analyze the interplay between consumer reviews and recommender systems on consumers' decision making. We analyze data of an online experiment manipulating the provision of consumer reviews and provider generated recommendations for a representative sample of online consumers. We find that recommendations do positively influence consumers' purchase decisions while recommendations of different sources have a negative interaction effect. Furthermore, we find that source credibility positively influences consumers to follow the recommendation.

■ TD03

03- Bern

Social Media

Contributed Session

Chair: Mark Kilgour, Chairperson Department of Marketing, University of Waikato, Waikato Management School, Private Bag 3105, Hamilton, 3240, New Zealand, kilgour@waikato.ac.nz

1 - Art Marketing and Art Management Adapting the Mathematical Model of the Hit Phenomenon

Kawahata Yasuko, Kyushu University, Kasuyagun Shinguumachi, Simonofu5-8-28, Fukuoka, 811-0112, Japan, purplemukadesan@gmail.com, Ishii Akira

For art marketing today, we can able to observe the response of people using internet like weblog, Facebook, Twitter etc. Therefore, art activities could say that it became possible to see the degree of advance and diversity of the influence which it has on society, or promotion of culture and art. Mathematical theory for hit phenomena[1] is the theory to model response of people in societies using statistical physics and it can be applied successfully. The key element of elements of the theory is the daily advertisement, direct communication (communication with friends) and indirect communication (rumor). Output of the theory is the daily purchase intention of people. The calculated daily purchase intention can be compared with the observed daily number of postings on twitter and blogs. By the prediction and analysis using this method, the route for spreading culture and art can be considered more briefly. For example, the show using what art museum, museum, and public facility should be held in the timing of when, or advertising timing and an advertising quantity can also be considered. Moreover, it is able for performing the art activities of what kind of contents to make it an index whether to be connected with the outreach to people who are not interested in art, and to refer to it. From the real data on social media, we can analyse the strength of advertisement effects for TV, newspaper, net-news sites and Facebook separately. [1] A.Ishii, H.Arakaki, N.Matsuda, S.Umemura, T.Urushidani, N.Yamagata and N.Yoshida, New Journal of Physics 14 (2012) 063018 (22pp) "The 'hit' phenomenon: a mathematical model of human dynamics interctions as s stochastic process." Previous studies for box office in marketing science are referred in ref.1.

2 - Is a "Social" Media Future Anti-Social?

Mark Kilgour, Chairperson Department of Marketing, University of Waikato, Waikato Management School, Private Bag 3105, Hamilton, 3240, New Zealand, kilgour@waikato.ac.nz, Sheila Sasser, Chelsea Lockwood

Social media has evolved over the past few years to emerge as an important new media format without requisite scrutiny, accountability or longitudinal research. As individuals and organizations around the world rush to plan, develop and implement integrated media campaigns, there are still questionable analytics issues surrounding social media. Even as some companies are moving quickly to keep pace with constant changes in order to develop social media strategies, controversies continue to arise related to social media infographics, segmentation and privacy issues. The findings of this particular social media research highlight differences in social media acceptance and appropriateness across a longitudinal time frame through a triangulation of participant observation interviews, Delphi expert techniques and anthropological methods. Various sample groups representing different demographic, lifestyle, occupational profiles are queried in two different countries. Respondents showed disparate attitudes and acceptance of social media dominance. Much more research is needed to better understand how this new media works and how it is integrated across various media usage contexts, as part of the media mix. Greater understanding can come from past theories underlying social behaviours and in particular the areas of interactivity, user control, relationship marketing, engagement, and motivation. Granted that social media has bought about a radical change in how billions of people communicate and some believe that it is changing the very environment in which we interact. Given interaction is the most fundamental of human behaviours, the consequences will be significant. These potential consequences are not just in terms of how people engage with businesses and each other, but also how humans behave and think in this social media era. This study is a continuation of a series of studies. Prior studies worked toward uncovering a model of how social media changes our basic communication and interactive processes. This model lead to a series of questions about the potential future that social media is leading us to. In order to gain an understanding of that future, a Delphi study of social media experts was panelled to elicit their opinions. Preliminary results provide significant insights into that future.

■ TD04

04- Monch

Panel Session: Modelling the Behavior of Decision Makers: Structural Models, Agent-Based Models, Bayesian Models and Beyond

Cluster: Special Sessions

Invited Session

Moderator: Rosanna Garcia, Associate Professor, Northeastern University, DíAmore-McKim College of Business, Boston, MA, United States of America, r.garcia@neu.edu

1 - Modelling the Behavior of Decision Makers: Structural Models, Agent-Based Models, Bayesian Models and Beyond

Panelists: Rosanna Garcia, Tulin Erdem, Eitan Muller, Peter Fader

There are numerous ways to model agents' decision making; some are more correct than others, given a particular situation. This special session brings together marketing thought leaders to discuss different approaches to modeling decision-making. Each speaker will present advances in their area of expertise. A discussion will follow concerning under which situations is the proposed method best used and what pitfalls to avoid when using the modelling approach. The intent of the special session is to generate a spirited, but friendly, discussion on how one method or another is best suited and/or used.

■ TD05

05- Montblanc

Emerging Markets and Beyond

Contributed Session

Chair: Patrick Poon, Lingnan University, 8 Castle Peak Road, Tuen Mun, Hong Kong - PRC, patpoon@ln.edu.hk

1 - Market Drivers in an Emerging Economy

Lancy Mac, University of Macau, Avenida Padre Tomas Pereira, Taipa, Macau, lancymac@umac.mo, Felicitas Evangelista

Market driving strategy has received considerable attention in the strategy literature with a spur in the number of firms that displayed competitive behavior that is able to transform the market in favor of their competitive edge. We conducted a qualitative study with the objective of conceptualizing the construct 'market driving strategy' by investigating the market behavior of these market drivers in an emerging market. Market drivers are firms that are able to create radical innovation in terms of either products/services and/or marketing and thus able to change and lead the market. In-depth interviews were conducted with business-to-business firms who are key industry leaders in China. Results revealed a number of distinguished characteristics of market drivers. Market drivers not only have acute understanding of their customers, they are also proactive in terms of anticipating problems and emerging needs of their customers. They also work closely with them to initiate new products/services tailored specifically to them. Most important of all, they provide total solutions specific to the customers making it difficult for customers to switch to other competitors. Our findings complement and add new insights to previous conceptualizations of market driving strategy which focus on proactiveness (Narver, Slater and MacLachlan 2004) and overwhelming customer's expectations (Jaworski, Kohli and Sahay 2000; Kumar, Scheer and Kotler 2000). Our findings also suggest that being market oriented is an essential pre-requisite for successful implementation of a market driving strategy among these industrial firms.

2 - How Consumers' Subjective Knowledge Shapes Preferences in an Emerging Market: The Chinese Car Market

Lixian Qian, Xi'an Jiaotong-Liverpool University, 111 Ren'ai Road, Suzhou Industrial Park, Suzhou, 215123, China, lixian.qian@xjtlu.edu.cn, Didier Soopramanien

Whilst car markets in most developed economies have experienced limited growth mainly due to the financial crisis, the Chinese car market has experienced exponential growth in the past decade. In 2010, China leapfrogged the US to become the biggest automobile market in terms of vehicle sales. However, a car is a new product for the Chinese. A recent McKinsey Quarterly report (2012) 'Building brand in Emerging Markets' stated that 60 percent of car buyers in China were going to buy their first cars this year. The knowledge that consumers have about a product category influences their search process which, ultimately, influences two key decisions which are particularly relevant in the context of the Chinese car market (a) whether to buy a car and (b) what type of car to buy. Research on consumer knowledge is particularly relevant when consumers are learning about a new product. Interestingly, it becomes important to recognize that consumer knowledge level can be used as a segmentation variable because different groups of consumers have different levels of knowledge about the new product. Our research empirically models how subjective knowledge influences consumers' decision to buy cars and the type of cars that they buy. Research on car market preferences in many mature markets often ignore how consumer knowledge influences preferences for cars because such a product is familiar to most consumers in such markets. We demonstrate that it is important to include knowledge level and its impact on consumer car preferences in emerging markets like China. Implications for car manufacturers in terms of the marketing strategy to address the needs of different groups of consumers are also highlighted in the research.

3 - Country of Market Effect in China

Shenyu Li, Assistant Professor, Shanghai University of Finance and Economics, No.777 Guoding Road, Shanghai, 200433, China, li.shenyu@shufe.edu.cn, Rong Huang, Siva K. Balasubramanian

We propose and test a model of country of market effect, which refers to the consumer's response to a product marketed in a particular country. We conduct an experiment of 2 (country of market: U.S. and China) x 2 (country of manufacture: U.S. and China) x 2 (product: printer vs. printing paper) between subject design to explore the mechanism and boundary of this effect among the Chinese consumers. We found U.S. as a destination market positively influences consumer's purchase intention. This effect is reduced if the product is made in U.S. Moreover, the design image and innovation image of U.S. as a country of market positively mediate the country of market effect. It implies that U.S.'s design and innovation images might spill over to the Chinese marketers in U.S. within their home country. Moderated mediation analysis shows that the country of market effect is conditionally mediated by the pride image given the product is manufactured in U.S. This result demonstrates that only purchasing products made in U.S. and marketed in U.S. might induce Chinese consumer's pride. Additionally, country of manufacture effect is mediated by the innovation image but not the design image of country of manufacture. Hence products made in U.S. are perceived to be more innovative and influence consumer's purchase intention. It implies that Chinese consumers believe that U.S. manufacturers withhold the innovative technology if the product is made in China. However, the design image bears no difference between Chinese and U.S. manufacturers. Finally, the pride image negatively mediates the country of manufacture effect when the country of market is China. This result reveals Chinese consumer's ethnocentrism in that they feel proud of purchasing products made in China if marketed in China.

4 - Consumer Animosity and Brand Country Association: A Study of Chinese Consumers

Patrick Poon, Lingnan University, 8 Castle Peak Road, Tuen Mun, Hong Kong - PRC, patpoon@ln.edu.hk, Lianxi Zhou, Chun Zhang

Prior research has indicated that consumer animosity has negative impact on consumers' willingness to purchase foreign products from a particular country. This study aims to examine the moderating role of brand country association in the effect of consumer animosity on consumer purchase intention for foreign products from an offending country. In addition, individual thinking styles are in turn expected to influence the moderating effect of brand country association. In this study, a 3 (consumer animosity: high, low, and control) x 2 (brand country association: high vs. low) x 2 (thinking style: analytic vs. holistic) between-subjects factorial design was conducted. 180 adult consumers were randomly recruited in mainland China. In general, the results support the proposed hypotheses and find that the higher the brand country association with an offending country, the greater the negative animosity effect will be. Furthermore, when the consumers' thinking style is analytic, the moderating influence of high (vs. low) brand country association on the effect of consumer animosity will be augmented. On the other hand, when the consumers' thinking style is holistic, the moderating influence of high (vs. low) brand country association on the effect of consumer animosity will be weakened or unchanged. Managerial implications for the formulation of brand management strategies regarding the negative effect of consumer animosity are discussed.

■ TD06

06- Monterosa 1

Online Consumer Behavior

Contributed Session

Chair: Selin Germirli-Yerebakan, Bogazici University, 34342 Bebek, Istanbul, Turkey, selingermirli@gmail.com

1 - Impact of Negative Online Reviews on Consumer Purchase Intention: Based on Product Information

Jing Qiu, Zhongnan University of Economics and Law, ZUEL of China, Wuhan, China, qjing107@foxmail.com, Yan Xinliu

This paper introduces the impact of negative online reviews on consumer purchase intention from the dimension of the product information. This study uses the experimental method, and analysis the impact of product information which is divided into tangible and intangible attributes of the negative online reviews on consumer purchase intention moderated by the type of product type. Results suggest that the product information of the negative online reviews has a significant effect on consumer purchase intention. Product type has no significant moderating effect between product information of the negative online reviews and purchase intention.

2 - A Study of the Effectiveness of Online Scarce Promotion - Comparison of Planned and Unplanned Buying

Xishu Zheng, Zhongnan University of Economics and Law, Zhongnan University of Economics and Law, Wuhan, 430000, China, chrisvinie@hotmail.com, Nian Liu, Li Zhao

Promotion can stimulate consumer's unplanned buying which is regarded as the main source of sales growth, however, it may increase consumer's planned buying shortfall as well. On one hand, online scarce promotion more significantly influences consumer's unplanned buying and planned buying shortfall; on the other hand, frequent and continuing online promotion weakens its marginal performance. Under such circumstance, it becomes imperative for us to ascertain whether online scarce promotion can contribute to the growth of consumer's purchases by comparing the effect of online scarce promotion on planned buying and unplanned buying. Our empirical analysis show that online scarce promotion can decrease consumer's planned buying shortfall, and also increase consumer's unplanned buying, thus adding to consumer's actual buying relative to their intended purchases.

3 - Social Shopping Motivation: An Exploratory Study

Selin Germirli-Yerebakan, Bogazici University, 34342 Bebek, Istanbul, Turkey, selingermirli@gmail.com

For many years researchers have drawn attention to the importance of social motivations in shopping. More recently, social networking is becoming one of the major ways in which people socialize by the rapid emergence of Web 2.0, which provided an increasing growth of social networking sites (SNSs). Social shopping emerges as the latest innovation in online shopping and combines social networking with online shopping. The distinctive feature of social shopping is its power of enhancing online shopping experience by providing social interaction. It provides a platform that a customer can utilize to interact with other customers through a collaborative online network. The aim and scope of this paper is to explore the motives that lie behind social shopping via qualitative approach. For this aim, qualitative research is preferred, since because of its exploratory nature it is very useful before hypotheses are tested more rigorously by quantitative research (Bryman, 1988). During the research, three focus group interviews and three in-depth interviews are conducted. The samples are selected regarding their wide knowledge on social shopping websites, and their extensive involvement in social shopping on a regular basis. The findings show that six dimensions emerged that are; information seeking, new socio-networking, need for opinion expression, opinion comparison, social browsing, and entertainment. These motives indicate that, consumers engage in social shopping in order to seek information, interact with other shoppers, express and compare opinions, follow up trends, and be entertained. This study extensively discusses these dimensions and provides an insight into the social shopping motives.

■ TD07

07- Monterosa 2

Marketing Metrics

Contributed Session

Chair: Ofer Mintz, Louisiana State University, 2117 BEC, Baton Rouge, LA, 70803, United States of America, omintz@lsu.edu

1 - A Dynamic Multilevel Structural Equation Model of Key Performance Metrics

Joonwook Park, Assistant Professor, Southern Methodist University, Cox School of Business, 318 Fincher Building, Dallas, TX, 75275, United States of America, jpark@cox.smu.edu, Seoil Chaiy, Seokoo Lee, William Dillon

Conducting customer satisfaction tracking today is commonplace as empirical evidence clearly supports that increasing customer satisfaction has positive impact on firm's performance metric. While the returns from customer satisfaction tracking are clear, how best to gain insights from such surveys is not at all clear as the structure of customer satisfaction data presents some unique modeling challenges. Although most customer satisfaction tracking is conducted over time, it typically has a Cross-Sectional Time Series (CSTS) data structure in which measurements of the same metrics are collected over time but on a cross section of respondents with a nested structure. However, typical analysis ignores this structure and either takes a cross sectional or a time series perspective. The former approach focuses on understanding the determinants of customer satisfaction within a given wave, whereas the latter approach aggregates across respondents for understanding the trends over time. Both approaches, however, are suboptimal in the sense that the cross-sectional perspective ignores the dynamic mechanisms of customer satisfaction metrics and the longitudinal perspective ignores customer heterogeneity. We propose a model that can accommodate both dynamic and cross-sectional aspects of customer satisfaction tracking data simultaneously. To achieve this goal, we develop a new dynamic multilevel structural equation model in which customer heterogeneity is modeled with a time invariant factor structure nested within brand and introduce a latent state space dynamic specification to capture the evolution of the determinants of customer satisfaction at the brand level. We test the proposed model in the context of a large customer satisfaction study in the automobile category.

2 - Contributions of Quantity and Quality of Marketing Expenditures on Firm Performance

Eric Eisenstein, Assistant Professor, Temple University, Fox School Business, 527 Alter Hall, Philadelphia, PA, 19122, United States of America, eric.eisenstein@temple.edu, George Chressanthis

Over the last decade, numerous scholars in marketing have emphasized the importance of quantifying the financial returns from marketing activity. Implicit in this endeavor is the assumption that it is not merely the amount spent on marketing, but how intelligently the marketing budget is spent that matters. If nothing else, marketing researchers believe that published, validated techniques are likely superior to ad hoc approaches. In this research, we use a novel dataset in an attempt to quantify the relative contributions of a number of variables to returns on marketing investment. Specifically, we examine: scale (firm size), expenditures on direct marketing activities (e.g., managerial span of control, pay to salesforce, expenditures per salesperson), expenditures on back-end marketing activities (e.g., marketing research, statistical analysis, segmentation, quantitative methods), and we estimate the role of "soft" aspects of the corporation as well, including cultural measures of innovativeness and responsiveness. A distinguishing feature of our analysis is the granularity of the firm-level dataset, which is composed mainly of data directly from the companies under study, augmented by equally granular data gathered from experts on these companies. Our results reveal that almost all items we measure are predictive of objective performance. Furthermore, the data support hypothesized interactions that collectively reveal the value of investments in marketing both in quantity (i.e., dollars spent) and quality (i.e., how money is spent).

3 - International Managers Metric Use: Antecedents, Consequences, and Contrasts with U.S. Managers

Ofer Mintz, Louisiana State University, 2117 BEC, Baton Rouge, LA, 70803, United States of America, omintz@lsu.edu, Imran Currim

In contrast to earlier work which reports drivers and consequences of U.S. managers' metric use, this paper investigates drivers and consequences of international managers' metric use in marketing-mix decisions. We address two unique questions. First, do five country-level regulatory and cultural variables, regulatory disclosure requirements, uncertainty avoidance, power distance, individualism, and long-term orientation, explain differences in international managers' metric use? Results indicate that increased country disclosure regulatory requirements, uncertainty avoidance, and long-term orientation decrease metric use and are more powerful in explaining differences in international managers' metric use than power distance and individualism. Second, do differences exist between drivers and consequences of international and U.S. managers' metric use? In addition to the aforementioned country-level drivers, our results indicate significant differences in metric use and marketing-mix performance between international and U.S. managers based on a number of managerial, firm, environmental, and marketing-mix decision variables. Our results allow us to identify conditions under which international managers are less likely to use metrics and suggest strategies to increase metric use in such settings.

4 - There is No Single Best Measure of Your Customers

Evert de Haan, Rijksuniversiteit Groningen, Nettelbosje 2, Groningen, 9747AE, Netherlands, evert.de.haan@rug.nl, Peter Verhoef, Thorsten Wiesel

New customer feedback metrics are introduced frequently, which promise to be better predictors than existing metrics, although empirical proof for these statements is often low. A popular example of this is the Net Promoter Score (NPS) by Reichheld (2003), which has since gotten quite some attention in business and scientific literature. More recently the Customer Effort Score (CES) by Dixon et al. (2010) has been introduced. This metric has been introduced as a very promising new metric that outperforms existing metrics such as customer satisfaction and the NPS. The purpose of our study is to compare these different customer feedback metrics with each other, and test their abilities to predict churn and changes in share of wallet and loyalty intentions. In our study we use data from a wide range of Dutch customers from approximately 100 different companies across 18 industries. Multilevel models are estimated that look at the firm- and customer level effects simultaneously. An important finding is that the CES does not deliver what it promises; customer satisfaction, NPS and loyalty intentions outperform CES in terms of predicting future customer behavior. An important reason for the low predictive ability of the CES is that the underlying question only applies to a specific part of the customer base. Another reason is that the CES only says something about a specific part of the whole customer service experience. We do find that the effectiveness of the metrics differ per industry and situation. Using different metrics simultaneously does improve predictions significantly over the use of single metric models. Contrary to what is being said by for instance Reichheld (2003), using a single metric is thus not ideal.

■ TD08

08- Edelweiss

Dynamic Pricing I

Contributed Session

Chair: Lu Qiang, City University of Hong Kong, P7701, ACAD, 83 Tat Chee Avenue, Hong Kong, Hong Kong - PRC, qianglu@cityu.edu.hk

1 - Advance Selling When Consumers are Heterogenous

Xubing Zhang, HK Polytechnic University, Hung Hom, HK, China, msxubing@polyu.edu.hk, Yulan Wang, Bo Jiang

Advance selling occurs when sellers allow buyers to purchase at a time preceding consumption. Electronic tickets, smart cards, online prepayments, and other technological advances make advance selling possible for many, if not all, service providers. Xie and Shugan (2001) have initiated an increasing research interest in adverse selling in marketing. In their model, however, the demand is extremely elastic (they assume that there are only one type of consumers: each consumer buys a unit of product subject to her willingness to pay) and so either all consumers buy (in the advance selling period or in the spot selling period), or nobody buys. In this research, we employ a more realistic model with a linear demand. Due to this consumer heterogeneity, our model exhibits an interesting equilibrium in which some consumers choose not to purchase in the advance selling period but end up making a purchase in the spot selling period if their valuation of the product is realized to be good. A new set of insights into advance selling are offered, some of which are in sharp contrast to those of Xie and Shugan (2001). For instance, Xie and Shugan (2001) show that advance selling is suboptimal if the firm's marginal cost is very small, whereas we find that advance selling is more profitable the smaller the marginal cost.

2 - Advance Versus Spot Selling with Consumer Anticipation

Rajiv Sinha, Arizona State University, 9643 S Dateland Drive, Tempe, AZ, 85284, United States of America, rajiv.sinha@asu.edu, Fernando Machado

Recent studies show that individuals frequently engage in mental 'time travel' by anticipating the pleasure or discomfort of future experiences. These abilities matter because they influence current decision making of consumers. We develop pricing models and derive new results to show that this anticipation utility provides a rationale for advance selling. Our analysis, in the context of a monopolistic firm facing heterogeneous consumers, shows that firms can optimally use a combination of advance and spot selling to discriminate between anticipators and non-anticipators. Interestingly, charging similar prices under both advance and spot selling can be a good approximation to such discriminatory pricing policies. We also demonstrate that the presence of anticipatory utility may provide firms with incentives to strategically restrict product availability in the spot market, a potential explanation for the recent shortages of iPhone4 and iPad. Finally, we test and confirm our theoretical results by studying the relationship between the disposition towards anticipatory utility and pre-ordering behavior in a random sample of over 600 consumers.

3 - Dynamic Pricing of Seasonal Goods: An Empirical Investigation into Optimal Price Paths

Shantanu Mullick, PhD Candidate, ESSEC Business School, Avenue Bernard Hirsch BP 50105, Cergy, 95021, France, shantanu.mullick@essec.edu, Nicolas Glady

We develop a model to estimate store level, time varying price sensitivities which permit us to infer optimal dynamic prices for seasonal goods. Seasonal goods are sold over a finite season and have limited availability. Analytical studies have demonstrated that, depending on the composition of customers, optimal prices can increase or decrease over time and have also established the relationship between optimal dynamic prices and price sensitivities. We define customer heterogeneity along two dimensions: their valuation of the product and their degree of patience (waiting costs). The differing demand environment for seasonal goods requires us to develop a flexible dynamic hierarchical linear model. We find that optimal prices, after the peak sales period, should be increasing if a store has predominantly patient, high-value customers; whereas optimal prices, after the peak sales period, should be decreasing if a store has predominantly patient, low-value customers. Our results indicate that to set dynamic prices optimally, seasonal goods retailers should exploit differences across stores in consumer characteristics.

4 - Dynamic Pricing with Evaluation Cost

Lu Qiang, City University of Hong Kong, P7701, ACAD, 83 Tat Chee Avenue, Hong Kong, Hong Kong - PRC, qianglu@cityu.edu.hk, Wei-yu Kevin Chiang

We consider a firm selling a new product to a market wherein customers are uncertain about their valuation of the product. This uncertainty can be resolved through a costly search for product information. The market consists of two types of consumers who differ in their attitudes towards risk, and thus the incentives which motivate them to engage in information search vary. There are two periods over which the firm can dynamically adjust the price to sell the product. Based on the price offered in each period, the customers choose either to search, to buy, or not to buy. We examine the optimal intertemporal pricing strategy under such settings and provide insights into how the firm should induce the customers of each type to search over time.

■ TD09

09- Mimosa

Advertising Creativity and Ad Content

Contributed Session

Chair: Leo Paas, VU University Amsterdam, Boelelaan 1105, Amsterdam, 1081HV, Netherlands, l.j.paas@vu.nl

1 - How Advertising Creativity Interacts with Brand Strength: A Field Study and Eye Tracking Experiment

Scott Koslow, Professor, Macquarie University, Room 639, Building E4A, North Ryde, Sydney, NSW, 2109, Australia, scott.koslow@mq.edu.au, Ahmed Al-Shuaili, Mark Kilgour, Sheila Sasser

Are creative advertisements more effective? And for what kinds of brands is the effect strongest? We argue that creative advertising for major brands can put consumers off because they already know a great deal about these brands. However, consumers know little about minor brands so consumers' memories are a blank slate upon which creative advertising can write. Thus, creativity's effect can be positive for minor brands, but negative for major ones. To investigate further, we started with a field study using industry data and then confirmed the effects in an eye tracking experiment. Industry data show that campaigns that win awards for effectiveness also tend to win awards for creativity. However, there are clear differences in brand position. It seems difficult for minor brands to win effectiveness awards without also winning creativity awards, but major brands can win effectiveness awards without much apparent creativity. In an eye tracking experiment, we confirm that creative advertising leads to higher levels of attention and that attention leads to more positive attitudes toward the advertisements. More creative advertisements are also more liked, however, attitude toward the brand differs between major and minor brands. For minor brands, the effect of creativity is positive, but for major ones, the effect is negative. A parallel effect is seen in memory as well. Although creativity had no effect on free recall, creativity enhanced ad and brand recognition for minor brands, but creativity reduced ad and brand recognition for major brands. An advertising strategy that emphasizes creativity may be critically important to minor brands' advertising, but major brands need to approach a creativity-oriented advertising strategy with caution.

2 - Application of Elaboration Likelihood Model to Single Source Data to Forecast Behavioral Transition

Satoshi Nakano, Assistant Professor, University of Tsukuba, 1-1-1 Tennodai, Tsukuba-shi, Japan, nakanosatoshi21@gmail.com, Fumiyo Kondo

Elaboration likelihood model (ELM) has been studied for many years as a model that consumers who received persuasive communication perform information processing at the occasion of purchases. ELM assumes that consumers follow two routes of different information processing, i.e., the "central route" or the "peripheral route" based on the presence or absence of the 'ability' and the 'motivation" to process information. Morioka (2009) applied the concept of ELM to single source data by using a binomial logit models. In order to improve Morioka's ELM, we propose a hierarchical Bayesian binomial logit model to analyze the differences among six hierarchical parameter groups that were classified by route and initial state: (1) central route or peripheral route; (2) the initial state of attitude-behavior (non-cognitive group, recognition group, buying experience group). The variables of "state change" from brand recognition to purchasing behavior were specified as the dependent variable and the "frequency of advertisement contact" and "information cues" as the explanatory variables. We compared models with the following four combinations that differentiate the route and the initial state on brand recognition/purchasing behavior: (1) no differentiation; (2) route differentiation; (3) initial state differentiation; (4) differentiation in initial states and routes (our proposed model). Our proposed model was selected as the best model among the models by the model selection criterion, DIC. We identified statistically significant factors on common information processing of new products. Some of examples were "rational decision" such as price vs. quality in the group of recognition group in the central route and "TV" in the group of non-cognitive factors in the peripheral route.

3 - Fashion Followers Prefer Moderately Thin Models: Moderating the Quadratic Effect of Model Body Size

Leo Paas, VU University Amsterdam, Boelelaan 1105, Amsterdam, 1081HV, Netherlands, l.j.paas@vu.nl, Denise M. Janssen

Advertisements attempt to improve consumer brand attitudes and purchase intentions. These goals are more likely to be realized when consumers have positive ad attitudes, implying salience of advertisement aesthetics, such as appearance of portrayed human model(s). We address attractiveness of female models in printed ads, which is a function of thinness, amongst other factors. Many advertisements portray thin female models, some of whom are unrealistically thin (Antioco et al. 2012). However, thin models can negatively affect women's mental health and health-related behaviors (Halliwell and Dittmar 2004). Such negative consequences of thin models negatively influence ad attitude (Andersen and Paas 2012). Thus, some contemporary firms portray oversized advertising models, e.g., Unilever's Dove campaign.The use of thin models is particularly predominant in the apparel industry, a $150 billion industry in the US and a €10 billion industry in The Netherlands, where the empirical study was conducted. We concentrate on thin models in this product category. We hypothesize and find that very thin female models and oversized female models both negatively influence ad attitude. There is an inverted U-shaped relationship between model body size and ad attitude, with a normal body size (i.e., a body mass index [BMI] between 18.5 and 25) as optimum. Moreover, we expect that in the apparel product category, the suggested quadratic relationship is moderated by the female consumer's fashion leadership level; the optimal model body size is thinner for fashion leaders and the inverted U-shape is flatter for them (i.e., a weaker peak and a weaker decline). We find empirical evidence for the flatter U-shape for fashion leaders, the U-shaped relationship is moderated in our PLS model.

■ TD10

10- EMBA 1

Brand Equity and Brand Performance

Contributed Session

Chair: Natalie Mizik, Gary Shansby Associate Professor of Marketing, University of Washington, 412 Paccar Hall, Box 353226, Seattle, WA, 98195-3226, United States of America, natalie@uw.edu

1 - Brand Equity Estimation Model: An Integration of Consumer and Financial Perspectives

Marta Olivia Rovedder de Oliveira, Professor, UNIPAMPA and Universidade Federal do Rio Grande do Sul, Rua Barão do Triunfo, 1048, Sant'Ana do Livramento, RS, 97573-590, Brazil, martaoliveira@unipampa.edu.br, Cleo Silveira, Fernando Luce

Although there is a consensus about brand equity importance, a single, uniformly accepted estimation model has not yet emerged, neither from consumer-based brand equity (CBBE) or financial-based brand equity (FBBE) perspectives. Hence, marketing professionals are still challenged to estimate the value of the brand. Furthermore, it is important to build a brand equity estimation model, which detects the consumers' perceptions and also presents a monetary estimation of brand equity, satisfying shareholders' requirements. Most of the existent CBBE models do not offer a monetary estimation of BE and many FBBE models do not observe consumers' perceptions. Most of them do not evaluate the brands' performance in future periods of time. This research developed a model that permits estimation of brand equity observing the consumers' purchase intentions and brand-switching probabilities, by applying the Markov Matrix. The brand-switching matrix was estimated by a cross-sectional survey, using a logit choice model. This research also investigated the monetary value of the brand, using the discounted cash flow mechanism. Our model allows the calculation of the value of the brand of a product, in particular, as well as the calculation of the company's brand. Our model enables the establishment of the link between customer mindset and evaluating the performance of brand in market, comparing the brand to its competitors. The integration between CBBE and FBBE allows the estimation of the financial return of marketing actions, checking the contribution of each of the drivers (brand awareness, perceived quality, brand loyalty, perceived value, brand personality and organizational associations) in brand equity.

2 - Mergers and Brand Equity: A Quantitative Analysis of Strategic and Efficiency Motives

Yanlai Chu, NUS Business School, Biz 2, #01-01, 1 Business Link, Singapore, 117592, Singapore, chuyanlai@nus.edu.sg, Junhong Chu, Hongju Liu

Motives and consequences for firms involved in mergers and acquisitions (M&As) have been extensively examined in the literature. However, consumer reactions to M&As and their impact on demand and firms' pricing decisions are overlooked, and the relative importance of different motives has not been compared. In this paper we provide a marketing perspective to M&As, and investigate the influence of the M&As-induced consumer's preference change on firm's post-M&A profitability. We empirically assess the impact of Lenovo's acquisition of the IBM Personal Computer Division on Lenovo's brand equity inside China. We propose a structural modelling approach in combination with the difference-in-difference (DID) method to assess the change in consumer's intrinsic brand preference due to the acquistion, and its impact on firm's profitability. The demand estimates show that the Lenovo's acquisition of the IBM PC Division did considerably enhance consumer valuation of the Lenovo brand, which in turn significantly increased Lenovo's post-M&A profits. From the counterfactual policy experiments, we find that without the acquisition, Lenovo's total post-M&A profit would shrink by 45%. A decomposition of the profit change reveals that the gains from the acquisition mainly come from the competitive advantage endowed by the Think series. By comparing the impact of strategic and efficiency motives on firms' profits, we find that quality improvement is more effective than cost reductions in raising profitability.

3 - The Financial Performance Impact of Customer MindSet Brand Equity: Only 10% is Current-Year and 90%

Natalie Mizik, Natalie Mizik J. Gary Shansby Associate Professor of Marketing, University of Washington, 412 Paccar Hall, Box 353226, Seattle, WA, 98195-3226, United States of America, natalie@uw.edu

We estimate the total financial impact of customer mindset brand equity and decompose the total impact into the current-year and future-term impact. We derive important substantive insights. Consistent with prior research, our results indicate that brand equity, as measured by customer mindset metrics, positively impacts current financial performance. However, we also document brand equity's significant and much greater impact on future financial performance of a firm: only about 10 percent of the total financial impact of brand equity is reflected in current-year profits, whereas the remaining 90 percent of the profitability impact is realized in the future. Brand equity models that rely on contemporaneous product-market performance outcomes–such as price, revenue, and profit premium–to evaluate brand's financial impact are missing the bulk of a brand's financial contribution and, as a result, can have negative consequences for brand management.

■ TD11

11- EMBA 2

Customer Satisfaction

Contributed Session

Chair: Edward Malthouse, Professor, Northwestern University, Medill School, 1870 Campus Drive, Evanston, IL, 60208, United States of America, ecm@northwestern.edu

1 - A Meta-Analysis on Finding an Adequate Compensation Type for Recovering from a (Service) Failure

Holger Roschk, Catholic University Eichstaett-Ingolstadt, Auf der Schanz 49, Ingolstadt, 85049, Germany, holger.roschk@ku.de, Katja Gelbrich

Post-complaint literature has established compensation (e.g., 20 % discount on purchase price) as a salient organizational response to offset a (service) failure. However, the reported effect size of compensation on customer reactions fluctuates, from non-significant/small to very strong. We argue that a major reason for this large variation lies in the broad spectrum of compensation types (e.g., discount, voucher, re-performance, exchange, apology) provided for different failures (e.g., monetary failure, flawed product, failed service, lack of attention). This meta-analysis examines how compensation type and failure type explain the recovery effect of compensation. We propose new classifications for both compensation and failure type by drawing on resource exchange theory. The analysis yields three major results. First, we observe the strongest recovery effect when compensation represents a resource similar to the failure it is supposed to offset. In particular, immediate monetary compensation (i.e., discount or money back) is most effective for a monetary failure, monetary value compensation (i.e., re-performance or exchange) is most effective for a flawed product or failed service, and psychological compensation (i.e., apology) is most effective for a lack of attention. Second, immediate monetary compensation has a larger effect than delayed monetary compensation (e.g., voucher or store credit). Third, the results also prove that resource-based classifications explain the recovery effect of compensation better than the current classifications of compensation (i.e., tangible vs. psychological) and failure type (i.e., outcome vs. process, monetary vs. non-monetary, reversible vs. irreversible). Recommendations for researchers and marketing professionals are provided.

2 - Do Customer Satisfaction Ratings Matter?

Jihoon Cho, PhD Student, University of Michigan, 701 Tappan Street, Ann Arbor, Mi, 48109, United States of America, jihoonch@umich.edu, Anocha Aribarg, Puneet Manchanda

Firms spend a significant amount of money to measure and track satisfaction ratings in multiple industries. These ratings are used as proxies for service quality as objective measures of service quality are usually hard to obtain. However, little is known about the value of collecting satisfaction ratings vis-á-vis business outcomes, especially at the individual customer level. In addition, participation in the ratings process is almost always lower than 100 percent, leading to a possibility of selection bias in the obtained ratings. We leverage a novel data set to address these two big issues. We use data, from the quick service restaurant industry, that provide us with individual level cross-sectional and time-series objective measures of service quality, satisfaction ratings and business outcomes. We model the satisfaction ratings incidence, the actual rating itself, and the interpurchase time via a two-stage model. In the first stage, we use a system of simultaneous equations with the first equation reflecting the customer's decision to provide a satisfaction rating and the second, the actual rating itself, based on the objective service quality, among other reasons. In the second stage, we model the customer's interpurchase time as a function of the estimated customer satisfaction. Our results shed new insights on the value of collecting satisfaction ratings.

3 - Firms' Costs and Customer Satisfaction

Rajdeep Grewal, Irving & Irene Bard Professor of Marketing, Pennsylvania State University, 406 Bus Building, University Park, PA, 16802, United States of America, rug2@psu.edu, Kapil Tuli

Whereas a large body of literature examines the effect of marketing actions/assets on the top and bottom line metrics, few studies examine the relationship between marketing actions/assets and the costs incurred by a firm. In this study, the authors build on economic theory to develop arguments for the effects of customer satisfaction on the costs of producing and selling of a firm. Employing a Bayesian approach on a panel data spanning a period of 17 years, the authors find significant heterogeneity (across firms and industries) in the effects of customer satisfaction on the two cost metrics.

4 - Perceptions Are Relative: Relationship between Relative Satisfaction Metrics and Share of Wallet

Edward Malthouse, Professor, Northwestern University, Medill School, 1870 Campus Drive, Evanston, IL, 60208, United States of America, ecm@northwestern.edu, Lerzan Aksoy, Alexander Buoye, Bruce Cooil, Arne DeKeyser, Tim Keiningham, Bart Larivière

Customer satisfaction is widely believed to be a fundamental determinant of long-term consumer behavior and loyalty. Nearly all extant academic research relates absolute ratings of satisfaction to predict behavior, while firms across many industries almost universally use ranks of satisfaction ratings and several models have been proposed based on the Zipf distribution and the wallet allocation rule. This research advances the field by providing the first rigorous theoretical, analytical, and empirical comparison of the approaches relating satisfaction to share of wallet (SOW) and the number of brands in the consideration set. We examine existing models, identify flaws and propose improvements. We also propose a new approach from biostatistics, beta regression models, where the errors follow a beta distribution and a logit link function relates a linear predictor to the mean of SOW. All models are compared with survey data from 10 countries and 12 industries using a weighted least squared criterion. Rank-based models substantially outperform ratings. Practical implications are discussed.

■ TC12

12- Geneve

Meet the Editors II

Contributed Session

1 - Meet the Editors

Editors of leading journals for marketing academics will present their editorial policies and perspectives.

The following editors are represented: Quantitative Marketing and Economics: Sridhar Moorthy; International Journal of Research in Marketing: Eitan Muller; Journal of Retailing: Praveen Kopalle; Journal of Service Research: Roland Rust.

■ TD13

13- Luzern

Measurement

Contributed Session

Chair: Thomas Reutterer, WU Vienna University of Economics and Business, Augasse 2-6, Vienna, Austria, thomas.reutterer@wu.ac.at

1 - Marketing Research using IVR vs. Human Operators: An Empirical Analysis

Sergio Meza, Assistant Professor Marketing, University of Guelph, 50 Stone Road East, Guelph, ON, Canada, smeza@uoguelph.ca, Andres Acevedo, Patricia Ross

Today's competitive market requires firms to constantly gain insights about consumers' needs. For that purpose, firms annually invest large amounts of money in marketing research. Only in 2010, the global investment in such studies surpassed US$ 30 billion (ESOMAR, Global Market Research 2011). Despite advances in internet and other smart devices, the use of individuals to perform these researches is still predominant in most markets. In Latin America, for instance, more than 80% of the marketing research is performed either via telephone or in face-to-face interviews. The use of individuals to collect information comes with a cost. When subjects respond to human interviewers, they tend to provide pleasing answers (i.e. social-desirability bias, see Tourangeau and Smith 1996; Tourangeau and Yan 2007). Advances in voice recognition Technologies are allowing to perform most of these studies without human intervention. We hypothesize that the use of such technologies (i.e. IVR's) avoids the occurrence of the social-desirability bias. This result is consistent with studies that found that self-administered questionnaires also avoid this bias (e.g. Chang and Krosnick, 2009). With the cooperation of a leading bank in Chile we test our hypothesis in more than 5000 costumers (Half called by humans and half by an IVR). Our results were consistent with our hypothesis. To gain more insights on the issue we also investigate different type of IVR voices (i.e. warm vs. neutral), and effect in question ordering, but we didn't find any significant difference. As the use of automated systems to replace humans is becoming common in many applications, this study advances our understanding of the advantages of such trend. In this new topic more studies are expected.

2 - Using Pre- and Post-Attitudinal Data to Explore Learning in Instructional Marketing Games

Larry Garber, Associate Professor, Elon University, 2075 Campus Box, Elon, NC, 27244, United States of America, lgarber@elon.edu, Unal Boya, Bibek Banerjee

Pedagogical research is hampered by the paucity of valid measures of learning, brought about by the fact that learning is a process that is esoteric, ephemeral, complex and multidimensional, and that confounds to learning outputs are rife in most any learning environment. One approach thought to aid validity is to collect pre and post data, and examine the differences that result due to intervening exposure to some particular learning tool. Here, we solicit pre and post attitudinal data to explore the learning experience stemming from participation in functional marketing games. Two hundred thirty-three undergraduate business students responded to a set of 42 attitudinal statements designed to measure learning on five dimensions pertinent to the game experience. The pre statements are framed in terms of students' expectations of the game experience, the post statements in terms of the experience itself. Additionally, students completed an inventory revealing their respective learning styles (Kolb, 1984). The resulting two data sets were then input to canonical correlation analysis, from which two Kolbian Learning Style Type Plots were generated. Students are represented as points in that learning style space, according to their respective preferred learning styles. Interpretation of the shifts in the positions of the individual students in the post versus pre conditions allows us to infer the nature of the learning that functional marketing games provided to each of them. Methodological and pedagogical implications are discussed. Additionally, the implications of the results in different cultural settings and the issues with the planned replication of this study in India will be discussed.

3 - Estimation of Average Treatment Effects using Panel Data: Theory and Application

Kathy Li, PhD Student, University of Pennsylvania, Wharton School, 3730 Walnut Street, Philadelphia, PA, United States of America, katli@wharton.upenn.edu, David R. Bell

This paper presents an econometric method to estimate average treatment effects using panel data.The estimation method is based on Hsiao, Ching and Wan (2011); however, we significantly weaken the assumptions imposed. We show that the average treatment effects can be consistently estimated without the linear conditional mean assumption. Moreover, we establish the asymptotic distribution of the average treatment effects estimator, which makes formal inference possible. Simulation results strongly support our theoretical findings. We apply the method to sales data from an online retailer, which has tried to tap into the benefits of traditional retail by opening showrooms in selected cities throughout the United States. We are able to quantify the treatment effect of opening showrooms on sales and find that average sales in these cities have increased by 37% compared with the counterfactual sale if the showrooms had not been opened in these cities.

4 - Structural Modeling with Graphical Models

Thomas Reutterer, WU Vienna University of Economics and Business, Augasse 2-6, Vienna, Austria, thomas.reutterer@wu.ac.at, Kathrin Gruber

Structural equation modeling (SEM) is a widely used methodology in the behavioral and social sciences including marketing. SEM approaches typically rely on some strong theoretical arguments for developing a structural model which implies a covariance structure that accommodates for latent factors to measure directly unobservable constructs. Thus, their use is generally limited to well-structured applications with a strong theoretical background and valid measurement instruments. In many marketing contexts, however, these assumptions do not hold. In addition, the causal interpretation of conventional SEM remains unclear and parametric modeling assumptions are often violated (e.g., nonlinear relationships, latent confounders, multicollinearity, etc.). The present study proposes the use of directed acyclic graphs (DAGs, a subclass of graphical Markov Models) as an alternative structural modeling approach. The method is able to detect linear as well as nonlinear relationships between structural variables in a multivariate model and does not expect a rigid underlying theoretical framework. The structural relationships implied by the DAG are derived using a model selection technique which requires just an initial ordering of the investigated variables. To measure latent dimensions behind the data the model search algorithm is combined with features of item response theory. The value of DAGs for structural modeling is demonstrated in simulation experiments. Under various conditions, we systematically deteriorate violations of conventional SEM assumptions and compare the model performance using several fit indices (such as, AIC, BIC, RMSE). The study shows that DAGs produce stable and robust and results and turn out to be a viable alternative for structural modeling.

■ TD14

14- Zurich

Innovation and Competition

Contributed Session

Chair: Sue Ryung Chang, Assistant Professor, University of Georgia, 310 Herty Dr., 130 Brooks Hall, Athens, GA, 30602, United States of America, suechang@uga.edu

1 - Effect of New Product Introduction and Cannibalization for Multi-Brand Companies

Xin-Yu Zou, Chair for Marketing and Market Research, University of Zurich, Institute of Business Administration, Andreasstrasse 15, Zurich, 8050, Switzerland, xin-yu.zou@business.uzh.ch, René Algesheimer, Florian Stahl

The importance of studying the effect of new product introduction and the often accompanied side-effect–cannibalization has always been highlighted. This is especially true for multi-brand corporates since they face not only potential cannibalization within the focal brand that launches a new product, but also possible cannibalization across different brands operated by the corporate at the same time. Although there has been research regarding cannibalization in the literature, quantitative analysis on how new product affects the sales dynamic among sibling brands is by far under-researched. This study uses time-series-cross-section methods (TSCS) to investigate cannibalization during new product introduction. Based on the characteristics of the data structure, we use the autoregressive distributed lags model (ADL) to identify the effect from new product introduction. The model is estimated through the panel-corrected-standard-error estimator (PCSE). And with proper re-parameterization, the error correction (EC) form of the model provides both short-term and long-term dynamics of the effect of new product introduction. Under the background of an industry starting to recover from a recession, the results from this study show how the introduction of a new product affects sibling brands and competitors' brands in the automobile market. Thus, our results help corporate managers better coordinate new product introductions among brands across categories to gain competitive advantage.

2 - Quality and Quality Claims: The Impact of Competition and the Cost of Overstating Quality

Praveen Kopalle, Professor of Marketing, Dartmouth College, 100 Tuck Hall, Tuck School of Business, Hanover, NH, 03755, United States of America, kopalle@dartmouth.edu, Don Lehmann

This paper examines the impact of competition and the cost of overstating quality on optimal quality and quality claims. We consider two firms simultaneously introducing a new product and making one-time decisions about the product quality, price, and advertised quality. Using a two period model which allows for larger weight on future period sales, we find competition leads to overstating quality unless constrained by high legal costs. Most interesting, when competitors are constrained to be truthful in their advertising due to legal or other costs, optimal product quality, and hence potentially consumer welfare, is lower. To evaluate the extent to which managers would behave in line with model prescriptions in different competitive and legal cost contexts, we conducted a conjoint style study. In the main, managerial intuition is directionally consistent with the model results. We also find the model assumptions and results are consistent with data from the U.S. Federal Trade Commission (FTC) on deceptive advertising cases decided between August 1996 and December 2002.

3 - Timing of New Product Release in the Presence of Competition

Mahmood Pedram, Assistant Professor of Marketing, American University in Dubai, P.O. Box 28282, Dubai, United Arab Emirates, mpedram@aud.edu

New product introduction is inherently a dynamic process. Firms must decide not only the quality of the product they release but also the timing. Competition also plays a role in determining when a firm should release its product. In the context of a product's life cycle, intuitively, firms should strive to stagger their product releases in an effort to reduce competition. Yet, we do not observe such a behavior in the marketplace. In the auto industry, firms release competing products within a year or so of their competitors. In the video gaming industry, console manufacturers are in virtual sync with regards to the release of their next generation products. Most firms in various tech industries like computer hardware, mobile phones, and digital cameras also tend to release their new products around the same time. In this research, an attempt is made to model the behavior of market participants to find out the optimal product release schedule for each competitor. In particular, various characteristics of sellers, consumer heterogeneity, and product purchase and replacement behavior is included. Conditions under which firms might opt to follow a synchronized release schedule are derived, as well as conditions under which they will engage in a perfect out-of-sync release strategy.

4 - Repositioning by Relaunch: How Does Relaunch Affect Consumer Perception and Internal Market Structure?

Sue Ryung Chang, Assistant Professor, University of Georgia, 310 Herty Dr., 130 Brooks Hall, Athens, GA, 30602, United States of America, suechang@uga.edu, Tulin Erdem

Relaunch is the replacement of a product on the market by a new version with major changes in product content and design. This study investigates the impact of a relaunch on consumer perceptions and, hence, internal market structure. The authors explore how relative brand positions in a product space will shift after a relaunch and how brand repositioning as a result of a relaunch affects consumer perceptions and choices. They also examine whether consumer habit persistence or variety seeking patterns change depending on the time since relaunch. The authors adapt a spatial factor-analytic choice model by accounting for a shift in brand attributes after a relaunch, while also allowing for consumer state dependence and the impact of the relaunch on consumer choice dynamics. The results show that relative brand positions in the market map shift after a relaunch and that a relaunch does not always affect consumers' state dependence patterns with respect to brand attributes in the shampoo category.

Friday, 8:30am - 10:00am

■ FA01

01- Montreux

Mobile and Social Networks

Cluster: Internet and Interactive Marketing

Invited Session

Chair: Manish Gangwar, Assistant Professor, Indian School of Business, Gachibowli, Hyderabad, 500032, India, manish_gangwar@isb.edu

1 - Pro-Social Behavior in Mobile Networks

Jayson Jia, Stanford University, 655 Knight Way, Stanford, CA, 94305, United States of America, jayson.jia@stanford.edu, Jianmin Jia, Xianchi Dai

Pro-social behavior, which occurred within two-hundred person clans in evolutionary environments, has taken new dimensions in a world where mobile phone users are theoretically interconnected with over 5.9 billion active subscribers globally. In a phone survey and two randomized field experiments involving 10,000 subjects connected to 330,000 subscribers in a telecommunications network, in contexts ranging from donations to recycling to helping strangers, we found that higher social status in a mobile network, as inferred from connectivity asymmetry and iPhone usage, predicted less pro-social behavior. Higher status individuals were biased against helping lower status solicitors–a finding which we tested causally by moderating network effects with an accent manipulation (a status proxy) in a phone solicitation context. We also introduce new measurement techniques: we identify individuals' network structure (e.g. connectivity asymmetry) as key predictors of important social behavior, and use individuals' response to an experimental manipulation (e.g. response rate and speed to a text message, amount of information provided during a phone call) as measurements of verifiable behavior, which is relevant for research topics including human interactions, communications, advertising response, and phishing. Our results showcase the possibilities of using large network based field experiments to understand and predict real behavior. Whereas previous network research is often limited by constraining instrumental variables or within-subject experiments, we use exogenous between-condition manipulations to directly test causality. We create and demonstrate a general experimental approach for network and wireless research which has general implications for social science research.

2 - A Structural Model of User Learning and Multi-Category Usage for Mobile Social Network Application

Dai Yao, INSEAD, 1 Ayer Rajah Avenue, Singapore, 138676, Singapore, dai.yao@insead.edu, Hernan Bruno, Lizhen Xu

The paper proposes a structural model of product usage in a setting where the product is a service composed of several distinct types of activities. Users pay a per-period subscription fee that allows them to access the service. During the period, users can explore each activity to whatever extent as they wish. Examples of such products include mobile apps, TV channels, computer games, enterprise productivity suites, fitness clubs, etc. We model the joint consumption of several within-service activities, using a modeling framework that captures the synergies among them. Our model allows users to divide their usage across activities according to their preferences as well as the decision to discontinue the relationship (i.e. churn). Learning is cast as consumer navigating through possibly different latent segments, until his preference converges and usages of different activities stabilize. We use subscription, daily usage, and churn data from a large sample of users on a social network mobile app to empirically test our model, and conduct policy simulations on (1) pricing policies, (2) product portfolio management (in our case, muting one activity), (3) partial pricing on selected activities (vs. full pricing), to provide managerial insights.

3 - Mobile Telephone Pricing: Contrasting India with USA

Manish Gangwar, Assistant Professor, Indian School of Business, Gachibowli, Hyderabad, 500032, India, manish_gangwar@isb.edu, Hemant Bhargava

Over 90% of the wireless mobile industry in India employs a prepaid (pay as you go) plan. In contrast 90% of subscribers in mature market such as US pick postpaid plans (bucket plans), albeit long term contracts. Indian wireless firms fret about this because prepaid consumers generally have low loyalty and generate lower revenue per unit compared to post paid customers. This is not surprising given the pricing strategies employed by two markets. Postpaid plans in US are quite attractive in terms of per unit price offered to the consumers in comparison to prepaid plans. However, Indian postpaid plans ask for higher per unit price from consumers compared to prevalent prepaid prices. We develop a theoretical model to understand under what conditions postpaid plans will have higher per unit price in comparison to pre paid plans and vice verses. The model explicitly takes in to account competitive prepaid market rate to design optimal postpaid plan facing heterogeneous consumers. One of the key insights from the model is

that consumers' higher valuation of postpaid plans combined with firms higher cost to serve postpaid customers in the presence of lack of mechanism to enforce and write long term contract leads to an unattractive postpaid plan. Recent government KYC (know your customer) regulation for prepaid customers further reduces the difference between the prepaid and postpaid customers hassle cost of getting a new plan. Interestingly this makes optimal postpaid tariffs even more unattractive. One of the recommendations of the model is to internalize lower churn rate of postpaid customers even in the absences of contracts in designing optimal postpaid plan to improve profitability. Using data from one of the major telecom provider we make specific recommendations.

■ FA02

02- Lausanne

Online Advertising

Cluster: Internet and Interactive Marketing

Invited Session

Chair: Michaela Draganska, University of Pennsylvania, Wharton School, 3730 Walnut Street, Philadelphia, PA, United States of America, dragansk@wharton.upenn.edu

1 - The Effect of Online Banner Advertising on Offline Sales

Lara Lobschat, Assistant Professor of Marketing, University of Groningen, Department of Marketing, P.O. Box 800, Groningen, NL-9700 AV, Netherlands, lara.lobschat@gmx.net, Werner Reinartz, Ernst Osinga

Many firms, including those that mostly sell offline, allocate increasing parts of their advertising budgets to online banner advertising. Yet, little is known about the effect of online banner advertising on offline sales nor about the mechanism behind this potential effect: do banner ads directly affect offline sales or is the effect mediated through more website visits? More importantly, what is the function of banner advertising: does it serve a more informative or rather more persuasive role? In this paper, we answer these questions by determining the cross-channel effects of banner advertising, while distinguishing between the informative and the persuasive effect of banner ads. Towards this end, we use unique data that documents online and offline behavior at the individual household level for seventeen subsequent online advertising campaigns by a single retailer. We develop a hierarchical Bayesian model that allows for both the informative and persuasive role of banner advertising. Further, we allow for a direct impact of banner advertising on offline sales as well as an indirect effect of banner ad exposures through website visits. Our results suggest that banner ads have a purely informative effect on website visits and offline purchases. Thus, our findings imply that firms should only target consumers up to the point that they become informed about the product offering. Moreover, we show that the effect of banner advertising on offline sales can be both direct and indirect, i.e., through website visits.

2 - A Dynamic Model for Digital Advertising: The Effects of Ad Formats and Message Content

Norris Bruce, Associate Professor Marketing, University of Texas at Dallas, 800 West Campbell Road, Richardson, TX, 75080, United States of America, norris.bruce@utdallas.edu, B.P.S. Murthi, Ram Rao

Digital advertisers can deploy a broad range of image formats throughout their campaigns. These include static formats (GIF/JPG) that offer neither animation nor interactivity; simple flash formats (.swf format) that offer animation but no interactivity; and rich-media formats that offer both interactivity and animation, with elements such as sound, video, floating images, and takeovers, among others. In this study, we develop a dynamic (state space) zero-inflated count model to quantify 1) the dynamic effects of different static (GIF) and animated (Flash) ad formats; and 2) the effectiveness of product and price ad impressions served within them. Given the form of the nonlinearity in the model, it is estimated using the Particle Filter, a Sequential Monte Carlo algorithm; here embedded with a Newton-Raphson iterative step to approximate the (analytically intractable) optimal importance function, which then improves computational efficiency. We find, for instance, that carry-over rates for dynamic formats (Flash) are significantly greater than those for static formats (GIF); and that the effects of product and price impressions differ across both types of formats. The study then considers the optimal media schedules given our findings.

3 - Beyond the Last Ad: Attribution in Online Advertising

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Online advertising campaigns typically utilize multiple channels, ad formats and ad technologies to promote a product. In order to properly allocate resources and compensate different channels for their performance, an advertiser needs to be able to measure a channel's impact and make complex allocation decisions, a process known as attribution. As the current trend is moving towards performance based measures, proper attribution is of paramount importance to advertisers. I propose a new solution for the attribution problem that elicits cooperation among competing channels. The technique uses intuitive "fairness" criteria for its specification. The attribution method resulting from the model is unique for each campaign and can be inferred from information available to the advertiser. To exhibit the issues with current attribution heuristics, I analytically compare the most common techniques used today to the new approach. An application over real campaign data from multiple online advertising campaigns is used to examine the impact of attribution and to develop further work on the topic.

4 - Internet vs. TV Advertising: A Brand-Building Comparison

Michaela Draganska, University of Pennsylvania, Wharton School, 3730 Walnut Street, Philadelphia, PA, United States of America, dragansk@wharton.upenn.edu, Wesley Hartmann

A key issue for media planners determining the share of their advertising budgets to spend on Internet advertising is whether Internet advertising can build brands as effectively as television advertising. To address this question, we extend traditional brand-message recall measurement to facilitate comparisons between Internet formats and television. Specifically, we supplement brand-message surveys conducted during the campaign with a set of pre-campaign surveys to control for pre-existing brand knowledge, and use a matching procedure to ensure the pre-campaign sample is comparable to the in-flight one. For our analysis, we use a rich data set comprising 20 campaigns, across multiple industries ranging from consumer packaged goods to telecommunications. We find substantial cross-brand variation in pre-existing knowledge as well as variation across advertising formats. In particular, individuals exposed to Internet ads have significantly lower levels of pre-existing brand knowledge than television viewers. Such differences in "initial conditions' ' suggest biases in comparisons between Internet and television ads, and possibly a more general failure of the brands to establish lasting associations among individuals shifting media consumption from TV to the Internet. Incorporating these pre-existing differences between media formats results in brand lift measures for Internet ads that are statistically indistinguishable from comparable television lift measures.

■ FA03

03- Bern

Strategic Consumer and Firm Decisions in Oligopolistic Markets: Session 1

Cluster: Special Sessions

Invited Session

Chair: Stephan Seiler, Stanford University, 520 6th Street, San Francisco, CA, United States of America, sseiler@stanford.edu

Co-Chair: Ahmed Khwaja, Yale University, New Haven, CT, United States of America, ahmed.khwaja@yale.edu

1 - A Dynamic Equilibrium Analysis of Firm Expansion, Productivity and Market Structure

Ahmed Khwaja, Yale University, New Haven, CT, United States of America, ahmed.khwaja@yale.edu, Jason Blevins, Nathan Yang

This research explores the role that inter-temporal productivity spillovers play in industry dynamics and market structure. In many retail industries, there may exist spillovers generated from the existing store base that lower future fixed costs or increase future revenues. The setting for our analysis is Canada's fast food industry from its beginning in 1970, to 2005, where we study all chains' decisions to expand across cities. We overcome the difficulty of estimating this seemingly intractable dynamic game of expansion with a large state space and serially correlated unobservables using a 2-step particle filter method. Our estimates demonstrate that serially correlated firm capability matters, and that a firm's size has an impact on the evolution of this productivity in expansion. Simulations show that the dominance of McDonald's can be attributed to its productivity, as its market power diminishes if one takes away this advantage. In fact, its market dominance is attributed to not only its ability to exploit inter-temporal spillovers, but also its retention of productivity gains. Its dominance is also robust to a sudden increase in the initial stock of competing outlets in 1970, or a sudden decrease in income during 2006. Through merger simulations, our estimated model provides some guidance as to whether a merged firm should adopt the management practices of a dominant partner like McDonald's.

2 - Innovation Equity

Ron N. Borkovsky, University of Toronto, Toronto, ON, Canada, ron.borkovsky@rotman.utoronto.ca, Ron Goettler, Avi Goldfarb, Brett R. Gordon

In many industries, the innovations that a firm achieves through research and development (R&D) are arguably its most important assets. Despite this, the literature is lacking in tools that can be used to assess the value of such innovations, or innovation equity, in an objective and systematic way. Assessing the value of innovation is complicated by the fact that the R&D process is inherently dynamic and stochastic. Successful innovation impacts both a firm's current and future profits, but innovation is not always successful. We propose a method for measuring innovation equity in a dynamic equilibrium framework that accounts for the effect of the innovation on both current and future profits. We apply this method to the Goettler & Gordon (2011) dynamic durable good oligopoly model of competition in the personal computer microprocessor industry. We measure the values of the innovations achieved by Intel and AMD between 1993 and 2004. Furthermore, we assess the effects of changes in industry fundamentals–such as price sensitivity, taste for quality, the effectiveness of investment, market size, and spillovers–on the value that each firm gets from its stock of innovation at a given point in time. The impact of fundamentals can be non-monotonic (and surprising) because of dynamic and competitive considerations underlying the decision to invest in R&D.

3 - Oblivious Equilibrium for Concentrated Industries

Przemyslaw Jeziorski, University of California-Berkeley, Berkeley, CA, United States of America, przjez@gmail.com, C. Lanier Benkard, Gabriel Y. Weintraub

In a recent paper, Weintraub, Benkard, and Van Roy (2008) propose a method for analyzing Ericson and Pakes (1995) style dynamic models of imperfect competition with many firms. In that paper, they defined a notion of equilibrium, oblivious equilibrium, in which each firm is assumed to make decisions based only on its own state and knowledge of the long run industry state, but where firms ignore current information about competitors' states. However, for some industries it seems likely that such oblivious strategies would be too simple to describe actual behavior. In very concentrated markets in particular, one might expect that the leading firms' strategies might depend on the state variables of the other leading firms. In this paper we introduce an important extension to OE designed to address such cases. We develop an extended notion of oblivious equilibrium that we call partially oblivious equilibrium (POE) that allows for there to be a set of 'dominant firms,' whose firm states are always monitored by every other firm in the market.

4 - New Service-Class Introduction: What Price Takes-Off?

Yesim Orhun, University of Michigan, Ross School of Business, 701 Tappan Avenue, Ann Arbor, MI, 48109, United States of America, aorhun@umich.edu

This paper analyzes a field experiment conducted by a large transportation company to determine the best pricing strategy for a new service class introduced in between two previous service classes offered. Using panel data on service class choices of consumers and the exogenous pricing interventions, we first study the amount of cannibalization versus upsell associated with the new service introduction. We document relatively low levels of cannibalization. We then analyze the determinants of consumer propensity to upgrade and price sensitivity and recommend pricing and targeting strategies that exploit the heterogeneity in consumer response.

■ FA04

04- Monch

Optimal Pricing Decisions

Cluster: Special Sessions

Invited Session

Chair: Yesim Orhun, University of Michigan, Ross School of Business, 701 Tappan Avenue, Ann Arbor, MI, 48109, United States of America, aorhun@umich.edu

1 - Countercyclical Pricing: A Consumer Heterogeneity Explanation

Ali Umut Guler, London Business School, London, NW1 4SA, United Kingdom, uguler.phd2008@london.edu, Kanishka Misra, Naufel Vilcassim

The well-documented phenomenon of countercyclical prices goes against intuition, as basic economic theory predicts a price increase when there is an outward shift in the demand curve. In this research, we provide a consumer heterogeneity based explanation for why the prices of seasonal products might be falling during their peak demand periods. We show theoretically that the optimal pricing scheme for a monopolist could be countercyclical due to the heterogeneous seasonal shifts in the consumer valuations. The firm exploits this heterogeneity, price discriminating so that only the higher valuation customers are served during the off-season. We provide empirical support for this explanation based on two consumer level panel datasets in the canned soup and tuna categories.

2 - Asymmetries and Dynamics of Cost Pass through in the U.S. Milk Market

Kanishka Misra, University of Michigan, Ross School of Business, Ann Arbor, MI, United States of America, kanishka@umich.edu, Romana Khan, Vishal Singh

This paper analyzes the channel pass through rates in the fluid milk category. Like most agricultural commodities, prices for raw milk display large volatility over time. Using a long panel data from several markets across the US, we study the asymmetric price response by retailers to increases versus decreases in costs of raw milk. The modeling approach takes into account asymmetries associated with both the magnitude and timing of cost pass through. Heterogeneity in price response across retailers is captured using a hierarchical structure where population parameters are allowed to vary across retailers due to observed and unobserved factors. Results show that the cost pass-through in the milk market is highly asymmetric. The instantaneous pass through for a cost increase is about 70% as opposed to only 30% for an equivalent cost decrease. One period later, we find a 100% pass through for cost increases, while the speed of adjustment to a negative shock is far slower. We also find significant and economically important heterogeneity across retailers in their response to cost shocks. We estimate the largest asymmetry in low-income African American neighborhoods, suggesting that these neighborhoods are the most vulnerable to volatility in milk costs.

3 - The Value of Price Information: The Case of Italian Highways

Federico Rossi, Bocconi University, via Roentgen 1, Milan, 20136, Italy, rossife@unibocconi.it, Pradeep K. Chintagunta

In this paper we study the value of price information. We investigate the introduction of fuel price boards on highways in Italy during the period 2008-2010. Using a unique dataset of daily, gas station-level prices, we measure the effects of this exogenous information shock on the pricing decision of gas stations located along the highway. Based on such empirical evidence, we then develop a consumer model of fuel purchase behavior and measure the effect on fuel price and consumer welfare of a more capillary diffusion of price boards along the Italian highways.

■ FA05

05- Montblanc

Pricing in the Channel

Contributed Session

Chair: Salma Karray, Associate Professor, University of Ontario Institute of Technology, 2000 Simcoe Street North, Oshawa, ON, Canada, salma.karray@uoit.ca

1 - Distribution Channel Prices and Pass-Through with Reference-Dependent Demand

Hernan Bruno, Assistant Professor, INSEAD, Boulevard de Constance,, Fontainebleau, 77305, France, Hernan.BRUNO@insead.edu

We study the pricing strategies for a firm selling through a distribution channel in a market with reference-dependent demand. There is a rich literature in marketing and economics documenting that consumers make purchase decisions by comparing prices to a reference price point that gets updated regularly though experience. As a result, demand depends on past market prices, and firms should take the impact of the current pricing decisions on future demand and profitability into consideration when designing pricing policies. In this paper, we analyze the equilibrium pricing strategies for a firm that only reaches consumers through a downstream intermediary (e.g. a manufacturer who sells through a distributor). Our models allows us to characterize how reference-dependent demand is transmitted upstream. In other words, the upstream firm faces a demand that is a function of the reference-dependent consumer demand and the strategic behavior of the intermediary. In general terms, our results depend on the pass-through rate of the intermediary. Therefore, we set few restrictions on the shape of the demand function with respect to price and reference price in order to allow for different pass-through rates. We find that the behavior of players depend on the extent to which they discount future payoffs and the concavity of the demand function. For "fairly linear" demand functions pass-through decreases with the discount rate. We also show that the share of profits that the upstream firm obtains is an increasing function of the discount rate. We illustrate our results for the a linear demand function, as well as with exponential, constant-elasticity and quadratic demand functions.

2 - A Structural Model of Price and Inventory Competition between Automobile Dealers

S. Siddarth, University of Southern California, ACC306, 3660 Trousdale Parkway, Los Angeles, CA, 90089-0443, United States of America, siddarth@usc.edu, Jorge Silva-Risso, Dinakar Jayarajan

We contribute to the empirical literature on inventory and price competition by proposing and estimating a structural empirical model of demand and supply among automobile dealers in a specific geographical market. On the consumer side, a demand equation that specifically incorporates the impact of dealer inventory, assortment characteristics and price is derived from a utility maximization model of a consumer's decision to purchase a particular car model. On the supply side, dealers choose prices to maximize profits, which depend upon their inventory carrying costs. The model is estimated using transaction data from the entry-luxury and premium mid-sized sedan categories for the Los Angeles market. The proposed approach represents the first integrated study of both the demand and supply side consequences of inventory that also overcomes several limitations of earlier studies. First, rather than using a cross-sectional analysis, we construct a panel dataset of weekly inventory levels, prices and demand for each dealer. Second, our model explicitly incorporates the service-level effect of inventory on demand, thus producing estimates of inventory elasticities that capture the service-level choices of the dealer. Third, our model also incorporates the competition between dealers and the impact of pricing on demand and on inventory. The model provides the first explicit quantification of the service-level impact of inventory on consumer demand and the ability to measure inventory elasticity and also permits us to recover the inventory carrying costs at the retail level. The model can help dealers and manufacturers manage their dealer networks more effectively by providing insights into how inventory carrying costs differ by distribution channel.

3 - Quantity and Price Competition between Asymmetric Channels

Chunming Shi, Wilfrid Laurier University, 75 University Avenue W, Waterloo, ON, n2n1e9, Canada, cshi@wlu.ca

In this paper, we extend the seminar work of McGuire and Staelin (1983) by considering asymmetric channels differing in base demand and substitutability. We also consider quantity competition between channels. We find that many results in McGuire and Staelin (1983) will not hold for asymmetric channels and/or quantity competition.

4 - Periodicity of Pricing and Marketing Efforts in a Distribution Channel

Salma Karray, Associate Professor, University of Ontario Institute of Technology, 2000 Simcoe Street North, Oshawa, ON, Canada, salma.karray@uoit.ca

Most research about cooperative (coop) advertising programs in channels relies on the assumption that manufacturers and retailers decide of pricing and marketing efforts simultaneously. This paper evaluates this central assumption and investigates the optimal periodicity of pricing and marketing efforts (ME) decisions for a distribution channel. We develop a game theoretic model that accounts for pricing at each level of the channel, for the manufacturer's ME mix strategies (a direct ME to consumers and coop advertising program offered to the retailer) and the retailer's ME as well. We obtain solutions for a bilateral channel under different vertical interaction scenarios; when the channel is led by the manufacturer, the retailer or when channel members decide simultaneously of each of their marketing mix decisions (vertical Nash). We compare the effect of pricing and ME decision periodicity on outputs for each channel member. The main findings suggest that simultaneous decision-making of pricing and ME is optimal only for high enough levels of the manufacturer's ME effects. For very highly effective marketing efforts, sequential play of pricing and ME allows channel members to implement equilibrium strategies and achieve maximum profits that wouldn't be achieved with simultaneous decision-making. This highlights the importance of relaxing the simultaneous play assumption of pricing and ME in a distribution channel.

■ FA06

06- Monterosa 1

Context Dependent Choices

Contributed Session

Chair: Liang Guo, Associate Professor, Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong, Hong Kong - PRC, mkguo@ust.hk

1 - How Numeric Framing Affects Risk Perceptions and Behavioral Intentions

Nevena Koukova, Associate Professor of Marketing, Lehigh University, 621 Taylor Street, Bethlehem, PA, 18015, United States of America, nkoukova@lehigh.edu, Joydeep Srivastava

We propose that framing may cause consumers to respond differentially to equivalent descriptions of the same information. Specifically, when the impact information is framed as relative frequency, respondents are more likely to engage in risk-reducing behaviors and less likely to buy a product under negative (e.g., require repairs, do not function satisfactory) as compared to positive (e.g., do not require repairs, function satisfactory) attribute framing. However, when the impact information is framed as percentage, the effect no longer exists. We investigate the underlying process and show that when the impact information is presented as negative (vs. positive) relative frequency respondents exhibit higher negative affect, resulting in higher perceived risk and lower likelihood to buy the product. Finally, the differential effect of negative relative frequency could be eliminated by displaying the impact information both numerically and graphically.

2 - Please Don't Tell Me, I Don't Want to Know it in Detail – Framing and Perception of Increased Prices

Timo Zagel, Doctoral Student, University of Erlangen-Nuremberg, Lange Gasse 20, Nuremberg, 90403, Germany, timo.zagel@wiso.uni-erlangen.de, Martina Steul-Fischer

This research experimentally examines how different frames of increased prices are perceived and evaluated by customers. Increased prices can be framed aggregated with a rebate, so that the price increase is hidden for the customers, or the price increase and the rebate can be presented separately and obviously. When the rebate is higher than the price increase we show that customers perceive a hidden price increase more positively and fairer than an obvious price increase. Even when the price increase is relatively high but still lower than the rebate, customers can perceive a hidden price increase as positive and fair. However, customers can perceive the increased price more negatively and unfair when the price increase is relatively high and obvious. We also find that when customers detect the hidden price increase they evaluate the increased price more positively and fairer compared to the obvious price increase. We argue that customers prefer to evaluate only the price they have to pay. When the price increase is lower than the rebate, they don't care about the hidden price increase, even when they have noticed it. We conclude that customers don't want to make the cognitive effort to calculate the price increase and the rebate separately when the price increase is hidden. However, when customers are explicitly told about the increased price, they perceive the price increase more negatively and less fair.

3 - Choice Overload Problem under Context Dependent Presences

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The traditional economic theory assumes a non-satiation agent. This assumption sounds plausible when consumers make a choice between equally attractive products with no prior preferences as the probability of having a better-fitted product increases with the number of alternatives. Nonetheless, this more-is-better story is at least not bounded to a choice-making situation in the real world. A number of experimental studies have provided some evidence that consumers tend to deter from making a choice or are less satisfied with the large number of alternatives. This is referred to as choice overload problem. However, even with the huge amount of studies on choice overload problem, there are still remaining questions; how to determine the threshold that triggers choice overload problem and why the results of the preceding studies are not consistent amongst each other. To examine these questions, this paper presents a numerical model with the context dependent preference. In this model, we assume that consumers evaluate a product against all given alternatives by each product attribute and feel loss if the product is inferior in a certain attribute. With this model, we show that the choice-overload problem is aggravated when individuals are more sensitive to comparison and put more weight in losses than gains. Depending on the magnitude of these two causes and their interaction, the benefit attainable from having a better-fitted product can diminish even with low number of alternatives or grow with a large number of alternatives. With these findings, this paper suggests that managers should consider consumers' sensitivity to comparison and their degree of loss aversion when deciding how many alternatives to offer.

4 - Contextual Deliberation and Preference Construction

Liang Guo, Associate Professor, Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong, Hong Kong - PRC, mkguo@ust.hk

A number of studies suggest that preferences are constructive and susceptible to decision environment. Yet preference construction can be systemic and endogenous. When preference ordering among options in a choice set is state dependent, decision makers can engage in information acquisition activities (i.e., deliberation) before making a choice. Seemingly irrelevant options can influence the incentive to deliberate and thus exert externalities on each other's preference ordering. Consequently, contextual deliberation may lead to the construction of preferences and yield behavioral anomalies such as the compromise effect and choice overload.

■ FA07

07- Monterosa 2

Health Marketing I

Contributed Session

Chair: Satheesh Seenivasan, Monash University, S6.23, Sir John Monash Drive, Caulfield East, 3163, Australia, satheesh.seenivasan@monash.edu

1 - The Dynamic Impact of Nutritional Innovations on Healthy Food Sales

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Food companies, governments, and societal organizations take great efforts to stimulate consumers to buy food products that are not just tasty and appealing, but also more healthy. As a consequence, many food markets have experienced the entries of novel food products which are, for example, low on fat or sugar free. Nutritional innovations, however, are often not the only major events in a market. Indeed, foods markets may face multiple extraordinary shocks including, among others, price changes, natural disasters, food harm crises, union strikes, or system breakdowns, which may all affect the food purchases of consumers, and, indirectly, their caloric intake. The market response patterns of these extraordinary shocks can be very different. They may create a one-shot peak, slowly disappear, gradually converge to a fundamental market change, or immediate alter the market's long-term performance level. In this study we introduce a testing sequence that determines all the major shocks in a food market and their specific response patterns. Doing so, we identify how unique nutritional innovations are in stimulating more healthful food choices among consumers. The framework is applied to various product groups, that vary in terms of nutritional content, in the Dutch yogurt product category in the period of 2002 to 2008. This period was characterized by the entry of several fat-free and sugar-free alternatives. Key results are that the novel products created market turbulence above and beyond the regular shocks that appear in every period, and that the total number of extraordinary shocks differ dramatically across product groups. The substantial influence that the uncovered shocks may have on the caloric intake of consumers is also discussed.

2 - The Effectiveness of the Tobacco Display Ban in Canada: A Field Study

Srabana Dasgupta, Assistant Professor, Simon Fraser University, 8888 University Drive, Burnaby, BC, V5A 1S6, Canada, srabanad@sfu.ca, Tirtha Dhar

In Canada, tobacco display bans involves the restriction of retail displays at the point of sales. The primary motivation for this legislation is the belief that point of sales advertising and displays increase tobacco use, especially among younger users. Tobacco retailers and the tobacco industry, however, claim that studies supporting such claims are severely flawed in their design and provide little reliable evidence that tobacco displays play a significant role on smoking initiation, prevalence, consumption or quitting. Given these conflicting views, it is important for research to understand the true effect of display bans and document both its benefits and costs. Existing experimental studies are conducted in laboratory settings and create an artificial environment which does not mimic the real world. Thus, the question can only be truly answered using field data where actual choices of individuals are represented. Furthermore, these studies are limiting in their scope as they fail to address whether retail display bans channel sales to other markets such as the illicit tobacco market or the internet, or whether the ban reduces variety seeking behavior among buyers, or whether display bans increase adoption of smoking cessation products. In Canada, since the ban was introduced sequentially over several provinces, this creates a natural experiment where various variables related to smoking initiation and continuation can be compared across the treatment (display ban) and control groups (no display ban). We use individual level data on smoking behavior, collected over a period of roughly 10 years by Statistics Canada, to implement a difference-in-difference model that allows us to tease out the various effects of the display ban across treatment and control groups.

3 - The Ideal Beauty Effect on the Overweight Epidemic – Theory and Evidence

Daniel Shapira, Ben-Gurion University, Guilford Glazer Faculty of Business, Haifa, Israel, shapirad@bgu.ac.il, Amir Heiman, Oded Lowengart

Female models and film actresses are playing a leading role in the fashion industry and therefore affect consumers set of values of appearance and beauty. Nonetheless, in contrast to the dramatic increase of the proportion of overweight and obese individuals in developed countries among youngsters and adolescent females the models' body size has considerably shrinked over the years. For example, while in the 60s the ideal beauty body size (e.g. as represented by James Bond girls BMI) was located around the 27% percentile of young females population in the US (in ages 17 to 35) nowadays it is only in the 3% percentile. In this paper, we argue, that the thin females ideal model has an indirect accelerating effect on the overweight epidemic among youngsters. Using a neo-classic economic model that captures an interplay between two reference weight points: that of the ideal beauty (thin body size) and of the median weight of the population. Both affect individuals' decision of calorie consumption. When these two reference points are far apart, the thin ideal point becomes an unreachable goal and, hence, loses its ability to be a restraining force against weight gain. This leads to a continuous increase in the median weight of the entire population. We provide supportive evidence to our theory based on large scale data from the National Health and Nutrition Examination Survey (NHANES). We analyze the US population BMI over the years vis-à-vis the ideal beauty body size proxies while controlling for large sets of demographic variables and food industry data. Our study suggest that previous literature, which blamed thin model as a cause to anorexia, is only private case of our approach.

4 - An Emotional-Psychology Approach to Explanation of Adoption of High-Risk, High-Involvement Service

Sachiko Ohno, Keio University, 4-1-1 KBS Hiyoshi, Kouhoku-ku, Yokohama, 223-8526, Japan, sachikohno@a7.keio.jp, Akihiro Inoue

Although the healthcare industry can be regarded as service of high-risk, high-involvement sector, there are many healthcare services that are not really used on the contrary to favorable attitude and interest. This research attempts to derive the implications for marketing strategy to promote a uterine cervix cancer vaccination, as an example of such a healthcare service, using guilt and shame emotions based upon the emotional psychology. We found that guilt emotions tend to provoke arousal to actions and shame emotions to avoidance to actions (e.g., Tangney 1995, 2003; Barret 1995). So as to apply these effects of guilt and shame emotions to stimulate the adoption behavior of the healthcare service, we first develop the original scales of guilt and shame emotions. Because most of existing scales treat the individual personality and develop in the context of developmental psychology, these scales are difficult to use in marketing context (e.g., SSGS by Marschall, Sanftner, and Tangney 1994). First, according to previous study, we derived lower constructs (causal attribution, emotional experience, empathy) in guilt emotions and shame emotions and implemented the first survey to collect text data in order to develop the candidate items for these lower constructs. After running the text mining, we developed the first set of the items and implemented the second survey to examine the reliability, discriminant validity, and convergent validity based upon Cronbach's Alpha and MTMM (multi-trait multi-method) analysis. We succeeded in developing the well-reliable, well-validated items. And we run the third survey so as to examine the content validity of our developed scales and turn into sound results. We show the details in the presentation.

5- What Do We Know about the Food We Are Eating? The Effectiveness of Nutrition Labelling

Satheesh Seenivasan, Monash University, S6.23, Sir John Monash Drive, Caulfield East, 3163, Australia, satheesh.seenivasan@monash.edu, Dominic Thomas

Obesity is one of the major public health concerns in the world. As unhealthy food consumption is a primary cause of obesity, nutrition labeling in the form of nutritional information panels (NIP) has been mandated in several countries to help consumers make informed decisions. Despite the mandate, the role of NIP in influencing consumers' product choices and hence its effectiveness in curbing unhealthy food consumption remains questionable. In this paper, we study the impact of NIP from both supply and demand perspectives. On the supply side, we investigate how nutrition contents of food items have changed after the introduction of labeling laws. On the demand side, we investigate the impact of NIP usage on actual consumer choice behavior to ascertain whether label usage is in fact associated with choice of healthy food items. In addition, we also analyze the effectiveness of Australian NIP format. We use data from variety of sources including field observation, survey, syndicate nutrition data and scanner panel data from a major Australian retailer. Our findings have significant implications for marketers as well as public policy makers.

■ FA08

08- Edelweiss

Dynamic Pricing II

Contributed Session

Chair: Aras Alkis, Koc University, Rumelifeneri Yolu Sariyer, Istanbul, Turkey, aalkis@ku.edu.tr

1 - Dynamic Targeted Pricing

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We consider dynamic targeted pricing in a market served by a monopolist selling a durable good. Rational consumers exhibit heterogeneity in both valuation and time preference. Specifically, consumers can purchase in either the first period or the second period. A discount factor applies to purchase made in the second period. There are two customer segments characterized by different intra-segment valuation heterogeneity. The monopolist can price discriminate consumers based on their intertemporal preference and/or heterogeneity in valuation. The targeting technology of the monopolist ranges from primitive to perfect. Under static pricing where a single price is charged to each customer segment, we show that targeted pricing leads to higher profit even when targeting is inaccurate and the seller knows no more than the relative size of the two customer segments. Under dynamic pricing, prices are successively reduced over the two periods. In this case, targeting is generally profit enhancing but there are conditions under which the monopolist is better off engaging in dynamic pricing only. We discuss the value of price commitment in this context. We also compare the efficiency of dynamic pricing with that of targeting.

2 - Seasonality in Dynamic Consumer Inventory Models

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Previous studies have found that forward-looking behaviour plays an important role in the decisions consumers make when purchasing storable goods. Static demand models have been found to overestimate price margins by as much as 30 percent. In dynamic models of storable goods, forward-looking consumers make their purchasing decisions based on observed prices and their current inventory. Because the inventory of each consumer is typically not observed, estimates of the inventory are constructed from the consumers' observed purchases and presumed consumption. To estimate consumption, inventory models have assumed that the expected desirability or consumption of the good is either constant or follows a Markov process. However, these assumptions are not appropriate for goods that are more desirable at certain times of the year. In this paper, I estimate a dynamic inventory model that accounts for seasonal shifts in consumption utility in the condensed soup industry. To estimate the model, I introduce a cyclic nested fixed-point algorithm, which reduces the computational burden caused by adding seasonal variables to the state space. I apply the findings of this model to calculate optimal prices when introducing condensed soup into a market with a different climate.

3 - How Consumer Response to Changing Prices Vary with Regulatory Foci: Loyals vs "Loyals"

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Consumers try brands, assess quality, establish their satisfaction with the brand and depending on how satisfied they are, they engage in repeat purchase. This stylized story about consumer shopping is important, because loyalty to a brand reduces price sensitivity and allow brand managers to engage in price discrimination. However, researchers have also criticized ignoring heterogeneity in loyalty and reported how loyalty moderates the asymmetric reference price effects. The complication increases as one revisits the story above and factor in consumer characteristics in forming loyalty. Based on the regulatory focus theory, we argue that consumers with a prevention focus are more likely than consumers with a promotion focus to display an excess preference for the 'status quo' brand, which stimulates further loyalty. However the loyalty from satisfaction and a prevention focus has opposite consequences for responsiveness to price changes. While a satisfied consumer is less responsive to increasing prices, a consumer with a prevention focus responds strongly. Pricing with a behavioral loyalty based segmentation therefore is limited in effectiveness, if it overlooks the source of the repeat purchase. We test our hypothesis by using scanner panel data provided by the Information Resources Inc. (IRI) that includes weekly household transactions in Eau Claire, Wisconsin metro area stores, for the period between 2001 and 2005.

■ FA09

09- Mimosa

Ad Targeting and Shared Consumption

Contributed Session

Chair: Sebastiano Delre, Assistant Professor, Bocconi University, Via Roentgen 1, Milan, 20136, Italy, sebastiano.delre@unibocconi.it

1 - Retargeting as Mean to Speed up Online Shopping Momentum

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Unless sales in e-commerce have increased tremendously in the last five years (e-marketer 2013), online retailer suffer from increasing numbers of user that just browse their sites but leave them empty-handed. Online shopping can be seen as an ongoing process that covers five stages (e.g., Kotler 2002). The first completed checkout is said to initiate an online shopping momentum (Dhar, Huber, Khan 2007). Recent studies show that interruptions might have a negative impact on the final outcome of a process (e.g., Lambrecht, Seim, Tucker 2010). Retargeting combines personalized recommendations or advertising based on consumer internal browsing of a firm's website with the use of external browsing data to track consumers across the web (e.g., Lambrecht, Tucker 2011). Thus, in case of an interruption of a shopping process it tries to bring users back to a priory visited website. This study aims to show if interruptions really harm the online shopping momentum (1), if retargeting is a mean to close interruptions in the online shopping process (2), and finally whether retargeting speeds up the return of the user and thus the momentum (3). To answer these research questions we conducted several field experiments including users receiving no, standardized, and personalized ads. We jointly model buying and advertising processes with a multilevel simultaneous equations event history model, as it is well suited for handling individual level duration data, integrates both processes, and allows for correlation between them. Our results show that retargeting is adequate to re-enter the momentum. Still, effectiveness of retargeting as a booster of the momentum depends on when in the process the user interrupts. On basis of our results management and research implications are derived.

2 - Cookies' Best Before End – The Impact of Cookie Deletion on Advertising Effectiveness

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Retargeting combines personalized recommendations or advertising based on consumer internal browsing of a firm's website with the use of external browsing data to track consumers across the web (Lambrecht, Tucker 2011). In both, marketing research and practice, it has long been recognized that greater specificity of a firm's interactions with consumers should increase relevance and consumer response (e.g., Hoffman, Novak 1996). As a result, retargeting has been praised as the 'Holy Grail' (Mitchell 2007). The most common method of identifying and tracking online consumers' activity involves the placement of cookies on a consumer's hard drive that are then offered back to the website during subsequent visits by the consumer. Against this background, online advertisers face a decisive challenge: As online advertising becomes more personalized, firms run the risk that customers will find the advertising intrusive and invasive of their privacy and that reactance will lead them to resist the ad's appeal (White et al. 2008). Commercial studies show that 31% of computer users clear their cookies in a month–with tendency to rise (comScore 2007; 2011a; 2011b). We jointly model a user's series of decisions (1) to click or not to click the ad, (2) to delete cookies manifest in the advertising and the cookie deletion processes, and (3) the state in the online purchase process with a multilevel simultaneous equations event history model. We estimate our model using data of a large-scale field experiment with a major fashion and sporting goods retailer. Results indicate that the effectiveness of the ad depends on the state within the shopping process and that high advertising pressure leads to cookie deletion. We derive several managerial implications from our findings.

3 - Measuring Attention to Advertising: A Comparison of Gaze Duration and Duration of Page Exposure

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Attention to advertising is an important metric for measuring advertising effectiveness. This paper validates duration of page exposure from clickstream data as a measure. Usual approaches to measurement, such as surveys and eye-tracking, are relatively static and are dependent on the willingness of consumers to cooperate with researchers. By contrast, the data captured by a website's clickstream provides a readily accessible, non-invasive tool. A within subjects experiment was performed to allow measures to be directly compared. A website was developed which contained a current digital edition of a general interest magazine (for example Forbes or Time Magazine). Following the completion of a questionnaire participants 'took a break' to read the magazine. A post-questionnaire was administered following a filler task. The participant's eye gaze duration was observed through eye-tracking equipment, and page exposure was collected from the website's clickstream. Formal statistical analysis was performed at both a page- (n=2190) and individual-level (n=30) which demonstrated that the gaze duration and duration of page exposure were equivalent. Analysis of a range of covariates (for example gender and prior magazine readership) was performed on both sets of data and no significant relationships were evident, which shows the robustness of the findings. Given the greater ease with which page duration data can be collected, the recommendation is to assess attention to advertising using clickstream data. This can be done routinely and inexpensively and would facilitate assessment of different behaviors on attention to advertising. By contrast, eye-tracking is best reserved for very detailed evaluation of advertising, such as copy testing.

4 - Let's Go Together: Modeling the Effects of Shared Consumption Experience on the Success of Movies

Sebastiano Delre, Assistant Professor, Bocconi University, Via Roentgen 1, Milan, 20136, Italy, sebastiano.delre@unibocconi.it, Thijs Broekhuizen, Tammo Bijmolt

Consumers frequently jointly consume hedonic products, and often let their purchase decisions depend on the availability and willingness of others to have shared consumption experiences. We investigate the impact of shared consumption experience, a type of social influence that increases the enjoyment of the experience itself, on the lifecycle and success of movies. The authors hypothesize that the effectiveness of advertising varies with the importance consumers attach to shared consumption experience and develop an Agent Based Model (ABM) that is capable of estimating the moderating effects of shared consumption experience on the relationships between advertising expenditures and launch and post-launch sales. The simulation results of the empirically validated ABM show that an increase in advertising leads to an acquisition of demand–especially at launch–but not to an acceleration of demand. Further, shared consumption experience strengthens the effects, such that the acquisition effect at launch becomes stronger at higher levels of shared consumption experience. Our ABM is empirically validated against vast and rich information of the US motion picture market and it helps managers to study what-if scenarios demonstrating the financial consequences of strategic decisions.

■ FA10

10- EMBA 1

Branding and Consumer Behavior

Contributed Session

Chair: Esra Arikan, Assistant Professor, Dogus University, Dogus Universitesi Zeamet Sk. Isletme, Bölümü KBlok Oda No:500 Acibadem Kadikoy, Istanbul, Turkey, earikan@dogus.edu.tr

1 - How Fans' Engagement into Facebook Brand Fan Pages Influences their Behaviors Towards Brands?

Laurent Flores, Professor, INSEEC Business School, 27, Avenue Claude Vellefaux, Paris, 75010, France, lflores@groupeinseec.com, Karine Raïes

This research proposes to test an integrative model with the objective of identifying the antecedents of brand loyalty and brand recommendation of Facebook brand fans. Indeed, even if more than 4 millions brands have fan pages on Facebook, very few academic studies are available to understand the link between consumer's interactions with a brand on Facebook and future behaviors toward that brand (Gummerus et al. 2012). However, in a related field, virtual brand communities, many researchers have identified a number of relationships that offer a better understanding of the phenomenon. De Valck & al. (2007) highlight the impact of satisfaction with the community on community participation level. Participation level is identified as consumer engagement by other authors (Bolton, 2011; Van Doorn, 2010). These findings support the impact of consumer engagement in brand activities on their future behaviors toward that brand. Moreover, some variables such as commitment (Gupta and Kim, 2007; RaÕes and Gavard-Perret, 2011) and community perceived benefits (Butler et al. 2002) were identified as mediating variables. The present research proposes to better understand the mechanism that connects consumer engagement with a brand fan page and their behaviors toward that brand. Using structural equation modeling on a unique data set available from leading brands in various categories ranging from packaged goods (food and beauty care), to electronics and apparels, we test an integrative model of the impact Facebook brand fans' engagement on their behaviors toward the brand. Results support the role of different variables identified in the domain of virtual brand communities' research and highlight the moderating roles of product category involvement and brand affinity.

2 - Mere-Alignability of Alphanumeric Brand Names: When Exposure to Mercedes Affects Choice between BMWs

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The use of numbers along with letters in brands–in other words, alphanumeric brand names (ABs)–became pervasive in many product categories (Boyd 1985). In retail environment, consumers often encounter numbers as part of brand names (e.g., Canon SD3500 and SD4500 cameras). While research on ABs has examined different types of associations between brands and attributes, the possibility that ABs themselves can function as independent attributes and get traded off has not been explored. Current research aims to address this gap, proposing two major contributions. First, based on the numerology literature, we develop a mere-alignability hypothesis to explain how ABs can function as regular attributes–even when they do not convey meaningful product information–and get traded off against objectively diagnostic attributes. For instance, a choice between Canon SD3500 with14MP vs. Canon SD4500 with 10MP potentially involves brand-attribute tradeoffs. As a result, even mere exposure to merely aligned competitor ABs can affect the choices of focal ABs (e.g., exposure to Nikon S6000 affecting the choice between two Canons). Second, we identify competitive categorization as a boundary condition for the mere-alignability effect such that only the ABs that are viewed as competitors affect the focal choices. Across four studies, we find support for our predictions. Studies 1 and 2 show that consumer preferences can be shifted easily through introducing competitor ABs in the choice context. Although the numbers had no diagnostic value, consumers treat them as regular attributes and engage in AB–attribute tradeoffs, prompting suboptimal decisions. Studies 3 and 4 further revealed that preference shifts disappear when the nonfocal brand is perceived as a non-competitor.

3 - Category Variety Seeking and Brand Variety Seeking in the US Snacks Market

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Brand variety seeking has been extensively studied while category variety seeking has not been studied as much. In this study, we use snacks consumption diary data from the US to study both types of variety seeking. One question that we investigate is: to what extent are heavy consumers of snacks also the ones engaging in greater varied consumption? From a managerial point of view this is a relevant question. Should a seller offer many varieties (brands) to meet the needs of heavy snack consumers? Clearly, if heavy consumers do not exhibit markedly higher levels of varied consumption we could conclude that increasing sales to them is better accomplished by marketing mix activities. On the other hand, if the opposite holds true for heavy consumers, we cold increase sales of a product by offering more varieties of the product. Of-course the same approach could be used by managers to also understand varied consumption behavior by different groups of consumers for targeting new varieties. Another question that is of interest is: how is an individual's varied consumption over snack categories and varied consumption over brands within a category related? Again, a seller would find guidance in how best to manage new product introductions. Although our study is restricted to snacks, the answer to this question provides an understanding of whether a variety seeking trait might characterize individuals.

4 - Expanding the Boundary of Brand Extensions through BRQ: The Influence of Style of Thinking

Esra Arikan, Assistant Professor, Dogus University, Dogus Universitesi Zeamet Sk. Isletme, Bölümü KBlok Oda No:500 Acibadem Kadikoy, Istanbul, Turkey, earikan@dogus.edu.tr

Prior research suggests that marketers should launch brand extensions characterized by high levels of perceived fit and avoid extensions marked by low levels of fit. Yet, in real life, it is not difficult to find examples of brands that have been extended successfully into relatively distant domains. Drawing on the brand relationship quality (BRQ) concept, this study introduces BRQ as a potentially critical factor that may help explain this discrepancy. It is believed that BRQ, together with perceived fit, acts as a key nomological factor in explaining brand extension success, and mediates the effects of a wide variety of antecedents (success drivers) on attitudinal and behavioral consumer responses to brand extensions. The proposed model is tested separately in the context of three different fit scenarios (high-fit, moderate-fit, and low-fit). The results based on data from a sample of 502 consumers generally support the hypothesized model, especially the significant role BRQ plays in the context of moderate extensions, suggesting that by strengthening their consumers' BRQ, firms can expand the boundary of extension products. The study further examines how consumers' style of thinking–analytical versus holistic–moderates the proposed relationships. The results emphasize the importance of the style of thinking for the generalizability of the proposed model, revealing not only that the responses of analytical thinkers and holistic thinkers differ significantly but also that within the context of brand extensions, BRQ is a more important concern for holistic thinkers.

5- The Moderating Effect of Customer Engagement on the Brand Image – Customer Equity Relationship

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Customer engagement (CE) can be defined as customer's behavioral manifestation towards a brand or a firm, beyond purchase, resulting from motivational drivers that leads to the formation of loyalty. It can take place in an offline or online environment whereas online CE has gained increasing attention due to the rise of social networking sites. Especially social networking sites, namely facebook, empower companies to engage their customers and potential customers to greater interaction. The contributions of this study are as follows: First, a conceptual model for the measurement of antecedents and consequences of CE is introduced. Second, a set of measures to capture antecedents, level of CE, and customer equity is developed. Third, the moderating effect of CE on the brand image–customer equity relationship is tested. The model has been empirically tested by collecting data on a facebook fanpage of our students. First, a survey has been distributed to collect data about antecedents of CE, second, by conducting an experiment on the students fanpage, engagement behaviour has been directly monitored to avoid single source bias within the data. To estimate the main effects as well es testing the hypotheses, partial least squares was used. The study provides insights in two aspects: First, a model for explaining customer enagement behaviour on a facebook fanpage is derived. Second, the analysis shows a significant negative moderating impact of CE on the brand image–customer equity relationship. Thus, the results can give managers insights, how engagement behaviour leverages customer equity and therefore might have a measureable economic benefit for companies engaging on a social networking site instead of focussing on traditional brand builing activites.

■ FA11

11- EMBA 2

Group and Context Effects in Choice Modeling

Contributed Session

Chair: Sotaro Katsumata, Nagasaki University, 4-2-1 Katafuchi, Nagasaki City, Nagasaki, 850-8506, Japan, katsumat@nagasaki-u.ac.jp

1 - Incorporating Group and Individual Dynamics in Group Choice Models

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Many important decisions are made by groups. The aim of this paper is to develop a model of group choice that incorporates both individual and group dynamics, while addressing key limitations with existing models. Current approaches assume that group preferences come from individual member preferences. This approach fails to recognize that individuals may have different preferences depending on their role in the decision. What an individual wants for a group may be different to what they want for themselves. Drawing on work in social psychology, this paper introduces the idea of multiple-selves. By considering the different sets of preferences that an individual takes into the group deliberation, we offer a new approach to modelling member influence. We estimate the degree of bias in past studies when trying to estimate influence from individual preferences alone. Further, while preference heterogeneity is well studied in marketing, choice variability–the degree to which choices are deterministic or random is less well understood (Louviere, 2001; 2006). Although recent studies have begun to incorporate heterogeneity in choice variation into individual choice models, there is no study that has examined this in the context of different decision-making units and in particular in groups. Our model incorporates both sources of heterogeneity. We calibrate our model through a four-wave choice experiment in the context of partners selecting a holiday destination. By providing a clearer understanding of who is influencing a group decision, this study allows managers to develop more effective targeting strategies, and better understand the implications of different decision-making units on choice outcomes.

2 - A New Model of Context Dependent Choice

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Economists have concluded that the phenomenon of context-dependent preference is inconsistent with the paradigm of value maximization as it violates the principle of independence of irrelevant alternatives. We however propose that this is not so. We develop a linear multi-attribute utility theory (MAUT) model of utility that demonstrates that context dependent choice is consistent with value maximization. In our descriptive model, the MAUT scaling constants are not invariant; they are a function of utilities derived by the consumer from the attribute levels of the options present in a choice set. Using behavioral arguments of imaginary consumption and cognitive dissonance, we derive the values of these scaling constants. Our model predicts important phenomena like choice reversal due to the addition of a dominated alternative, preference for bundles of goods with congruent benefits and extremeness aversion. It can also be used to analyze the performance of new products against existing products in a market.

3 - A Two-Stage Decision Model of Mobile Phone Choice: A Social Network and Service Perspective

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In today's saturated mobile market, an essential method by which mobile manufactures gain competitive advantage is to understand how phone users choose their phones and in what ways they use their phone services. We present a two-stage hierarchical decision model that incorporates both phone-type decision and brand-choice decision. We argue that customers may first consider whether they select a smartphone (phone-type decision) and then decide on which brand and model to choose (brand choice decision). The phone-type decision may affect customers' brand-choice decision. In addition, the factors influencing phone-type decision may differ from those influencing brand-choice decision. Based on the literature on technology adoption and social-networks, we examine the role of social networks in smartphone adoption. We empirically investigate the issue using a nine-month period data set from a telecommunication operator and find that social network variables such as social tie strength, network externality, and degree of centrality affect smartphone adoption. In particular, phone users with strong social ties, large networks, and high degree centrality are more likely to adopt smartphone. In the brand-choice model, we show that the service usage of voice calls, text messages, and mobile Internet are decisive for choosing mobile phone brand and model. Our findings provide new insight into the factors affecting smartphone adoption and phone brand choice. In addition, our results are useful in developing more appropriate measures of social-network variables in the mobile phone context.

4 - Random Regret Minimization for Consumer Choice Modeling: Assessment of Empirical Evidence

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This paper introduces to the field of marketing a new discrete choice model for the analysis of risky and riskless multiattribute consumer choices from multinomial choice sets. This random regret minimization model (RRM), which has two years ago been introduced in the field of transport by the author, forms a regret-based counterpart of the canonical random utility maximization paradigm (RUM). RRM consumes no more parameters than the most parsimonious form of RUM, and it features closed form Logit-type choice probabilities. As a result, RRM models–in either MNL, Nested or Mixed Logit forms–are easily estimable using a range of (canned) software packages. Since its very recent introduction a relatively small but growing body of literature (30 studies, reported in 20 papers) has emerged focusing on RRM's theoretical properties and/or on empirical comparisons with RUM. Choice contexts featured in these empirical comparisons include choices among travel alternatives, leisure activities, durable goods, dating profiles, and health care options. This paper assesses theoretical and empirical results that have been built up so far, with the aim of finding out to what extent, when, and how RRM can form a viable alternative for RUM. The paper shows that RRM (including the hybrid RRM-RUM model form) outperforms equally parsimonious RUM counterparts in a majority of datasets in terms of model fit and predictive ability. Although differences in performance are quite small, the two paradigms often result in markedly different managerial implications due to often substantial differences in elasticities, willingness to pay measures and market share forecasts. The paper explains how RRM and RUM can be used jointly to arrive at 'behaviorally robust' marketing strategies.

5- The Experiential Set Choice Model Based on a Heterogeneous Knowledge Structure of Consumers

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In this research, we propose a choice model for scanner panel data (behavioral data) based on a subset concept, the experiential set. As many previous papers have pointed out, consumers do not have perfect information concerning objective alternatives–for example, the product categories and attributes of each brand. Furthermore, they have a heterogeneous knowledge structure of the objective alternatives. Although marketers and researchers recognize that it is important to incorporate these latent behaviors of consumer information processing into empirical models, we can observe the choice result only from behavioral data. Hence many choice models assume that consumers have perfect information about the market and that they evaluate all of their available alternatives at the time of purchase and compare them in a rational manner. To address the above issues, we reexamine the conceptual model of consumer behavior, focusing especially on the information search process and dynamic knowledge growth. We propose a choice model based on these theoretical concepts. As mentioned above, because we can obtain only behavioral records from scanner panel data, we assume a dynamic purchase process model that is applicable to behavioral data. The proposed model has the following advantages. First, the model is theoretically sound compared with existing choice models that assume perfect information. Second, we verify that the model provides higher predictive performance, thereby allowing us to use it as a forecasting model. Third, the model offers many implications concerning consumers' state of mind.

■ FA12

12- Geneve

Decision Making

Contributed Session

Chair: Silu Yu, Zhongnan University of Economics and Law, 183# East Lake High-Tec Development Zone, Wuhan, 430073, China, yusiluec@163.com

1 - Cross-Cultural Differences in Price Search Decisions

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We report two laboratory experiments designed to investigate the impact of cultural background on price search decisions. In both experiments, two groups of subjects, from an Eastern (Thailand) and Western (the UK) cultural background respectively, participated in similar incentivized price search tasks. Search costs within each search task were constant with search in Experiment 1 but increased with search in Experiment 2. In the low search cost condition in Experiment 1, both culture groups under-searched relative to the expected payoff-maximizing optimal strategy. In contrast, in the same experiment's high search cost condition, Eastern subjects over-searched while Western subjects' decisions were close to optimal. Similar results were obtained in Experiment 2: Eastern subjects over-searched as they did not seem more willing to accept higher prices as the cost per additional search increased. Further analysis suggests that our results are driven by Easterners being more sensitive to sunk costs and thus more susceptible to escalation of commitment than Westerners, a notion that corroborates with previous literature. This difference did not create significant effects when search costs were low, as in the low search cost condition in Experiment 1. However, it caused significant over-searching among Eastern subjects in the same experiment's high search cost condition, and also when search costs increased steadily in Experiment 2. Our study highlights an important and systematic difference in search behavior between Easterners and Westerners. More generally, our results exemplify the perils of generalizing conclusions from behavioral research in marketing as well as judgment and decision making–which have been conducted largely in the West–across cultures.

2 - Exploring Context Effects with Consumer Mindset Data Across Cultures

Selin Erguncu, Koc University, 1220 Manning 6 LA, CA, Istanbul, Turkey, serguncu@ku.edu.tr

Context effects have been the focus of a large literature in psychology, marketing and economics for the past decades. Two of the most important and robust context effects are the attraction effect i.e. the higher attractiveness of a focal alternative when a (slightly) inferior option is offered next to it, and the compromise effect, i.e. higher attractiveness of the alternative in the middle relative the ones at extremes in terms of product characteristics. The present study contributes a cultural analysis by examining the prominence of these two context effects in emerging versus mature markets. As detailed in Pauwels et al. (2013), emerging and mature markets are likely to differ in cultural and economic factors. It has been also shown that individuals of emerging and mature markets differ in their regulatory focus. Moreover, Muorali (2005) has related regulatory focus to context effects. Taking all these links into consideration, this research provides a broader look at the context effects across cultures and presents a more comprehensive framework: the impact of the cultural and economic differences on context dependency is mediated by individuals' self-regulatory orientations. Hence, managers can expect a higher prominence of the compromise effect, but a lower prominence of the attraction effect in emerging vs. mature markets. To examine our predictions, we distinguish context effects from marketing effectiveness by observing consumer attitude changes with respect to the variation in consumers' price and quality perceptions. Our data belongs to an emerging and a mature market and combines marketing data with consumer mindset variables. We specify a 2-attribute product space and define the dimensions as product price and brand quality.

3 - Projection Bias in the Car Market

Jorge Silva-Risso, Associate Professor, Marketing, University of California, Riverside, 900 University Avenue, 201 Anderson Hall, Riverside, CA, 92521, United States of America, jorge.silva-risso@ucr.edu, Devin Pope, Jaren Pope, Meghan Busse

Many decisions that people make require them to predict their future utility. For example, choosing a job, planning a vacation, buying a house, and buying a car are all important life decisions that require predicting future utility across a variety of choice dimensions. Projection bias is the tendency to overpredict the degree to which one's future tastes will resemble one's current tastes. We test for evidence of projection bias in a large and very important a consumer market–the car market. Using data for more than forty million vehicle transactions, we explore the impact of the weather on purchasing decisions. We find that the choice to purchase a convertible or a 4-wheel drive vehicle is highly dependent on the weather at the time of purchase in a way that is inconsistent with classical utility theory. We show that sales of convertibles, 4-wheel drives, and vehicles that are black in color are highly influenced by idiosyncratic variation in temperature, cloud cover and snowfall. We show that for convertibles, weather that is warmer and skies that are clearer than seasonal averages lead to a higher number of sales. Controlling for seasonal sales patterns, our estimates suggest that a location that experiences a mean temperature that is 20 degrees higher than normal will experience a 0.22 percentage point increase in the percentage of total vehicles sold that are convertibles. Purchases of 4-wheel drive vehicles are also very responsive to abnormal weather variation–particularly snowfall. Our results suggest that a snow storm of approximately 10 inches will increase the vehicles sold that have 4-wheel drive by about 2 percentage points over the next 2-3 weeks (6% sales increase). Black vehicles are less likely to be purchased when the weather is warm and sunny.

4 - An Empirical Study of the Positive and Negative Effects of Online Service Guarantee

Silu Yu, Zhongnan University of Economics and Law, 183# East Lake High-Tec Development Zone, Wuhan, 430073, China, yusiluec@163.com, Xueni Li, Xiaoling Li

Service guarantee is a dilemma for e-sellers. As it will increase buyers' purchase intentions, but it may lead to more return goods too. The research makes an effort to study the influence mechanism of service guarantee, in order to help e-sellers to make their retail decisions. The results of our empirical analysis indicate that the higher the strength of service guarantee is, the higher degree of the sales level is. Besides, service guarantee will influence the refund rate with inverse U-relationship. So it is necessary to select a reasonable level of service guarantee.

■ FA13

13- Luzern

Finance and Marketing I: The Team

Contributed Session

Chair: Stefan Worm, HEC Paris, 1 Rue de la Liberation, Paris, France, worm@hec.edu

1 - The Role of CEOs' Self-regulatory Orientation in Defining a Firm's Business Performance

Johanna Frösén, Researcher, Aalto University School of Business, P.O. Box 21230, FI-00076 Aalto, Helsinki, 00100, Finland, johanna.frosen@aalto.fi, Cecile Cho

This study looks at the implications of a CEO's self-regulatory orientation on the firm's business performance. Specifically, we focus on two aspects of CEO self-regulation: assessment, concerned with critically evaluating entities or states in relation to alternatives, and locomotion, related to a commitment to movement from state to state. The business performance implications of CEOs reflecting assessment and/or locomotion are studied empirically with a sample of 346 firms. To account for the effect of environmental turbulence that the focal firm is facing, our sample consists of firms operating in markets characterized by different levels of market turbulence, competitive intensity, and technological turbulence. A structural equation model on the data reveals that, in general, CEO locomotion is found to be positively associated with firm performance, whereas the effect of CEO assessment is non-significant. Thus, firms with a CEO reflecting high locomotion generally appear to outperform others. Interestingly, however, competitive intensity is found to moderate this relationship – the higher the competitive intensity, the lesser the performance impact of CEO locomotion. Furthermore, in environments characterized by high competitive intensity, a CEO characterized by high assessment is found to have a positive impact on firm performance, whereas under low competitive intensity this effect is negative. Theoretically, our research contributes to the research on CEOs by capturing their motivational mindsets and examines how the mindsets are linked to the firm's strategic actions. For managers, our findings point to the importance of pairing CEO personality, especially in terms of self-regulatory orientations, with the firm's market environment and the rate of change in it.

2 - Liability of Middleness: The Moderating Role of CEO Attributes

Xiaoyu Zhou, PhD Candidate, Peking University, Room 501, Building 3, Haidian District, Beijing, 100871, China, xiaoyuzhou@pku.edu.cn, Xiaomeng Du

Political connection has become a hot research topic of marketing research in the past two decades. A growing body of economic and strategic literature on the implications of political connection suggests that this kind of business-government relationship helps firm to secure favorable regulatory conditions and access to resources such as bank loans, which ultimately increases the value of a firm and improves its performance. Therefore, political connection has particular importance for business survival and success in emerging market countries with weak market institutions and legal protection. As an important antecedent of political connection, the size of firm has been widely discussed. This study attempts to increase the understanding of how firm size influences the willingness of private firm CEO to build political connection. While pervious findings show small firms rely more on business-government networking, our research, in line with population ecology theory, proposes an inverted U-shaped relationship between firm size and CEO political connection. Additionally, we provide an upper echelon perspective by considering the moderating role of two CEO attributes (i.e., CEO age and CEO managerial experience). Using a nationwide cross-industry survey of private firms in the largest emerging market of China, we operationalize the measurement of political connection as the willingness of CEO to become a member of the ruling Communist Party and utilize the human capital (i.e., employment) as the measurement of firm size. Our results show that firm size has an inverted U-shaped influence on CEO political connection, and this relationship is flatter in firms with aged CEO and in firms with CEO that has managerial experience in foreign-owned enterprise.

3 - The Productivity Trap: Punishing the CMO for Satisfying Customers

Ming-Hui Huang, Distinguished Professor, National Taiwan University, 1, Sec. 4, Roosevelt Rd., Taipei, Taiwan - ROC, huangmh@ntu.edu.tw

The existing literature suggests a satisfaction-productivity tradeoff in pursuing profits. This tradeoff may create a productivity trap for CMOs, such that they would be paid less than they deserve when they improve customer satisfaction for a productive firm. We develop a productivity trap model to account for this phenomenon that integrates the satisfaction-productivity tradeoff literature in marketing with the profit-compensation literature in accounting and finance. The model is tested with 14-year customer satisfaction and CMO compensation unbalanced panel data and the results are compared with those for CIO compensation. We demonstrate that there is a satisfaction-productivity tradeoff for firm profit and this may result in CMOs being punished with a lower level of compensation than they deserve for improving customer satisfaction, if the productivity level of the firm is high. By further examining the structure of compensation, we find that when CMOs are paid with equity, they are no longer punished. The results provide implications for the design of compensation packages to avoid punishing CMOs for satisfying customers. Specifically, equity-based compensation should be used more in CMO compensation packages to alleviate the punishment that they are more likely to face than other functional executives.

4 - The Value Relevance of Top Management Team Marketing Attention

Stefan Worm, HEC Paris, 1 Rue de la Liberation, Paris, France, worm@hec.edu, Jialie Shen, Sundar Bharadwaj

Marketers firmly believe that they should be in the firm's driver's seat (e.g. Vargo and Lusch 2004), but in reality the attention paid to marketing issues by top management teams (TMTs) is fairly limited (Hyde, Landry, and Tipping 2004; Mcgovern et al. 2004; Nath and Mahajan 2008). This paper examines to what extent firms' ability to leverage TMT marketing attention is contingent upon marketing capabilities. TMT marketing attention can potentially affect firms' value in the stock market in contrasting ways. First, increased TMT marketing attention can signal that firms will take a long-term perspective in utilizing and managing the valuable intangible marketing assets which form the basis for sustained business performance. Second, heightened TMT marketing attention may also foreshadow costly future marketing investments. Given the widening marketing capabilities gap (Day 2011), many firms may not be able to efficiently implement these marketing initiatives, thus hampering firm value. The study develops and tests a higher-order measure of TMT marketing attention using a novel statistical textual analysis framework. The hypotheses are tested with publicly available panel data consisting of S&P 1500 firms from 2000 to 2010.

■ FA14

14- Zurich

New Product Adoption

Contributed Session

Chair: Emmanuelle Le Nagard, Professor, ESSEC Business School, Avenue B. Hirsch, Cergy Pontoise, 95021, France, lenagard@essec.edu

1 - Adoption and Rejection of New Consumer Durables: A Goal-directed Approach

Remco Prins, Assistant Professor, VU University Amsterdam, De Boelelaan 1105, Amsterdam, Netherlands, r.prins@vu.nl, Ruud Frambach

When considering the innovation adoption decision of consumers, research typically contrasts adopters and non-adopters. In these studies, non-adopters are generally assumed to be a relatively homogenous group. However, the group of non-adopters consists of consumers who deliberately choose not to adopt (rejecters) and those who have not made a decision yet (evaluators). As we show in this study, rejecters are surprisingly different from evaluators, and at the same time show some important similarities with adopters. Theoretically, we take an integrative approach by combining goal-directed adoption antecedents with consumer characteristics to show that innovation perceptions differ between adoption stages, depending on the type of consumer. We are specifically interested in the innovation perceptions of rejecters compared to adopters and evaluators. Empirically, we conduct a survey among 756 Dutch consumers in which we assess the adoption stage they are in (i.e.: evaluation, adoption, or rejection). Furthermore, we measure their perceptions on functional and psychosocial dimensions regarding 3 new consumer durables, as well as a set of psychographics to account for customer heterogeneity. Using a multinomial logit model, we find that rejecters are significantly different from evaluators in terms of innate innovativeness and in terms of their innovation perceptions. Our findings suggest that both adopters and active rejecters are not that different in the sense that they were both able to make a deliberate decision – either positive or negative, whereas consumers in the evaluation stage still experience too many uncertainties to decide. These findings have important theoretical and managerial implications.

2 - Consumer Disadoption of Old Technologies: The Case of Fixed to Mobile Substitution

Ralitza Nikolaeva, ISCTE-Lisbon University Institute, Av. das Forças Armadas, Lisbon, 1649-026, Portugal, ralitza.nikolaeva@iscte.pt

Some technologies are quickly supplanted by innovations, yet others continue co-existing with the new technologies. Why? What makes an old technology obsolete? This question is important to both technology providers and policy makers as the switch to new technologies might require significant investments by the business and public sectors. Many consumers continue using the old technology after the adoption of the new one. The new technology becomes a substitute only when consumers disadopt the old one. But the reasons why consumers continue or stop using an old technology are grossly under-researched. At the same time, the disadoption of old technologies is as an essential building block in the identification of disruptive technologies. This study takes a multi-level perspective to investigate the consumer disadoption decision. The multi-level perspective looks at environmental and supply side factors as well as consumer characteristics. We investigate how the model applies to the case of fixed to mobile phone substitution. Combining data from a consumer panel across eight European countries together with country level data about subscriptions, regulation, and cultural factors, we obtain preliminary results confirming some of the main propositions of the model. Namely, the disadoption of old technology is affected by institutional forces, network effects, market structure, and cultural characteristics. On the supply side, the availability of new features and reliability in the new technology along with competition between providers affects the disadoption decision. Consumer and lifestyle factors are discussed as well. The study helps in increasing our understanding of technological regime shifts.

3 - How to Sell Smart Grid Appliances: Addressing the Right Needs of Decision-Makers

Benedikt Römer, LMU Munich and TU Munich, Center for Digital Technology and Mgmt., Arcisstr. 21, München, Germany, roemer@cdtm.de, Philipp Reichhart, Arnold Picot

By setting ambitious environmental goals, governments worldwide push for energy systems to become more sustainable. As the supply of renewable energy varies significantly in time, there is an increasing need for electricity storage capacity. However, as huge infrastructure projects are lacking social acceptance, it is promising to foster the diffusion of distributed electricity storage systems (ESS) as part of a future smart grid. Small-scale ESS are likely to be installed in private households. With private households as the main customer, marketing is an important issue. Thus, the aim of our study is to identify factors influencing decision-makers in private households to adopt ESS. Additionally, we work out relevant needs that should be addressed in marketing activities when selling smart grid appliances such as ESS. We do this by analyzing large-scale survey data of participants randomly chosen out of a representative database within Germany, the largest European country with a fast-growing generation from renewable energies. To analyze the research questions we developed a conceptual framework and tested it using a structural equation model. Thus, we found strong empirical support for our research model. Our results show that the adoption process is influenced by environmental awareness and that concerns about the security of supply, perceived autarky and social norm have a significant positive influence on the customers' intention to purchase ESS. Of these, autarky and social norm have the highest impact. We discuss how our findings translate into measures for product development and marketing of ESS.

4 - The Resistance to the Adoption of a New Sales Force Automation System

Emmanuelle Le Nagard, Professor, ESSEC Business School, Avenue B. Hirsch, Cergy Pontoise, 95021, France, lenagard@essec.edu, Niek Althuizen

There is a vast literature on how people come to accept new technologies. Despite the accumulated knowledge about the factors that influence adoption and use, as summarized in the Unified Theory of Acceptance and Use of Technology (UTAUT), the implementation of new technologies in practice often encounters resistance, sometimes leading to blatant failures. Drawing on different adoption and use models, such as the technology acceptance, diffusion of innovations and IS success model, our study aims to shed light on factors that may help managers to easily identify and assuage pockets of resistance. In this longitudinal study, we take a very pragmatic approach by directly linking easily observable system-related, person-related and organization-related explanatory variables to outcome measures of technology use (over time) in order to identify the most important and persistent indicators of resistance. The data collected for this study concerns the multi-phased launch of a new sales force automation system at a large multinational high-tech company across seven European countries. We surveyed 278 intended users, at an early and later phase of the implementation process, and also gathered data on their actual, computer-recorded use of the new sales force automation system. Preliminary findings show five distinct groups that differ in their acceptance and use of the new SFA (e.g., skeptics and enthusiasts), which can be identified by a number of easily observable user characteristics. An implication may be that we need to devise different strategies for different groups to ease resistance or spread enthusiasm. Interestingly, we also find a substantial discrepancy between stated intentions and actual use. Additional results will be presented at the conference.

Friday, 10:30am - 12:00pm

■ FB01

01 - Montreux

Social, Mobile, and Local

Cluster: Internet and Interactive Marketing

Invited Session

Chair: Peter Pal Zubcsek, University of Florida, 212 Bryan Hall, P.O. Box 117155, Gainesville, FL, 32611-7155, United States of America, pzubcsek@ufl.edu

1 - Mobile Targeting: How Timing, Location and Personalization Matter

Michelle Andrews, University of Texas at Arlington, Arlington, TX, 76013, United States of America, andrews@uta.edu, Xueming Luo, Chee Wei Phang, Zheng Fang

Mobile technologies enable marketers to target consumers by time, location, and personalization. This study builds on a large-scale randomized experiment of short message service (SMS) sent to 11,794 mobile users. We identify that temporal targeting and geographical targeting individually increase sales purchases. Surprisingly, the effects on sales of employing these two strategies simultaneously are not straightforward. When targeting proximal mobile users, our findings reveal a negative sales-lead time relationship; sending same-day messages yields a 197% increase in the purchase incidence compared to sending them two-day prior to the promoted event. However, when targeting non-proximal mobile users, there is an inverted-U, curvilinear relationship. Compared to messages sent one-day prior, same-day messages decrease purchase incidence by 72%, and two-day-prior messages also decrease purchase incidence by 35%. We also show how message personalization and customer scenarios act as possible mechanisms that account for the effects. In a follow-up study, supplementary surveys find that consumer construal level is the underlying process accounting for the effectiveness of mobile targeting. Consumers who received SMSs close in time and location engaged in more concrete levels of mental construal, which increased their purchase intent through consume involvement. High construal levels also reduce the degree to which consumers perceive unsolicited SMSs as intrusive. These findings suggest that understanding the who, when, where, and how of mobile targeting strategies is crucial. Marketers can save money by carefully designing their mobile targeting campaigns.

2 - Effectiveness of Location-Based Advertising: A Randomized Field Experiment Comparing PC with Mobile

Dominik Molitor, Ludwig-Maximilians-Universität (LMU), Munich School of Management, Geschwister-Scholl-Platz 1, München, 80539, Germany, molitor@bwl.lmu.de, Anindya Ghose, Martin Spann, Philipp Reichhart

Location-based services provide information to mobile users about their physical proximity to different businesses (e.g., shops, retailers and restaurants) and offer promotional coupons. Similarly, IP-tracking also allows companies to target users browsing the web with their personal computer (PC) and offer promotional coupons. In addition, searching for product-related information (e.g., geographical distance to offline locations or discounts) implies a cognitive effort dependent on the position of the offer on the screen. The goal of this study is to experimentally test the effect of geographical distance between the user and a retail store on users' mobile choices by isolating the distance effect from the ranking effect. Using data from a large-scale randomized field experiment involving location-based advertisements on mobile phones and PCs, we find that users' choices are affected by the interplay between information on geographical distance and the rank of the offer on the screen. We discuss how location-based services provide a new layer of information between buyers and sellers, enabling new forms of local commerce.

3 - Social and Location Effects in Mobile Advertising

Peter Pal Zubcsek, University of Florida, 212 Bryan Hall, P.O.Box 117155, Gainesville, FL, 32611-7155, United States of America, pzubcsek@ufl.edu, Zsolt Katona, Miklos Sarvary

As the worldwide number of smartphone users has crossed the 1 billion mark, marketers are also increasingly using consumers' location information for better targeting advertising messages sent to mobile devices. Yet, little is known about the relationship between consumers' movement patterns and the efficiency of mobile advertising. In this paper, we study mobile advertising response in a panel of about 200 subscribers of a mobile operator in a Pacific country. The dataset spans about five months during which participants were targeted with coupons from retailers in various product categories via a smartphone application. The data contain the initial responses to and the actual conversions of such offers, detailed demographic and psychographic information as well as information both on the location of participants (based on GPS coordinates) and on their social ties (both in the form of referrals, and in terms of 'co-location'). In our paper, we compare the static referral ties to dynamic co-location ties and find that membership in the prior network accounts for substantially larger differences in advertising response. We also uncover specific individual movement patterns (e.g., the size of the 'core area' surrounded by points that the subscriber visited often) that correspond to increased advertising response rates in certain product categories. Our results have practical implications for marketers engaging in mobile advertising.

■ FB02

02- Lausanne

Online Word-of-Mouth

Cluster: Internet and Interactive Marketing

Invited Session

Chair: Liwu Hsu, Assistant Professor, University of Alabama in Huntsville, 301 Sparkman Drive, Huntsville, AL, 35899, United States of America, liwu.hsu@uah.edu

1 - Generalized Model of Advertising: Incorporating Electronic Word-of-Mouth into Advertising Model

Yana Ponomarova, PhD Student, ESSEC Business School, 65, Rue St. Maur, Paris, 75011, France, yana.ponomarova@essec.edu, Nicolas Glady

Marketing managers use an increasing variety of media vehicles for advertising. Such expansion is intensified by social web technologies and user-generated content (UCG) that provide marketers with alternative advertising instruments. Electronic Word-of-Mouth (eWOM), an alternative media springing from the Web 2.0 innovations is closely related to UGC and is usually defined in terms of consumers' references to products or services that are made available to wide audience via Internet. Current research investigates the effect of eWOM on category purchase incidence, brand choice and purchase quantity decisions using an extended version of an integrated utility-maximizing framework. This research uses a unique multi-channel consumer panel provided by a major FMCG manufacturer that matches household purchases, advertisements seen on TV, online banner exposures, and social network discussions. Such dataset allows to measure eWOM in the context of social network. Using this measure, current study investigates the effect of eWOM on consumer purchase decision-making, the role of social ties and brand involvement in the relationship, as well as contrasts the efficiency of the alternative media (eWOM) and traditional awareness-raising channels. Empirical model based on Hierarchical Bayes methodology accounts for observed and unobserved consumer heterogeneity and as a result, provides marketing managers with suggestions for multi-channel advertising strategies.

2 - Birth and Death of eRumors

Yutaka Hamaoka, Professor, Keio University, 2-15-45 Minato-ku, Mita, Tokyo, 108-8345, Japan, hamaoka@fbc.keio.ac.jp

The effective management of rumors is an important issue for marketers. This study, analyses the rumor that 'a toxic substance will be released with the explosion of a chemical plant.' This rumor was spread through Twitter during the Great East Japan Earthquake on March 11, 2011. Through text mining, we find that TV news that reported the fire and explosion in an oil industry complex caused fear and anxiety about the incident, resulting in the generation of the rumor. We also find that during the diffusion process, the rumor loses some details, is distorted, and is selectively focused (Allport and Postman, 1947). Besides, consistency and trustworthiness of the rumor is enhanced during diffusion. By analyzing the social network, we find that the source of the rumor was not an opinion leader, but an ordinary high school girl with only 150 followers. Interestingly, the diffusion of the rumor was accelerated when it was retweeted by a famous account, who was asked to do so by a follower. We conduct a time series analysis on the number of tweets with false information, corrections for the false information, TV news appearances, and news release timings from the oil company, local government, and mass media. We find that TV news of fire and explosion in an oil plant caused fear that resulted in the generation and diffusion of false information. This significantly affected the number of false information and correction tweets. We find that the number of correction tweets is insignificant compared to false information tweets. Press releases from reliable sources such as the oil company and the local government initiated the diffusion of correction information that suppressed the rumor.

3 - The Effect of Groupon Deals on Online Word of Mouth

Yue Wu, INSEAD, 1 Ayer Rajah Avenue, PhD Office, 2nd Floor, Singapore, 138676, Singapore, yue.wu@insead.edu, Kaifu Zhang, Yakov Bart, Theodoros Evgeniou, Paddy Padmanabhan

Nowadays a lot of merchants are running their promotions and issuing deep discount (around 50%) through online deal websites like Groupon. This business generates billions of dollars per year for daily deal websites. However, it is not clear whether and to what extent those deals improve or hurt merchant reputation. We collected restaurant deal data in two major cities in US for six months, together with all relevant online review data from Yelp Inc, the most popular restaurant review website in US. We investigate how Groupon deals and consumer characteristics influence the rating dynamic. Preliminary analyses show that (1) ratings tend to be lower after a Groupon deal is launched than before and that (2) a rating is especially lower if it is given by a consumer who has just redeemed a deal.

4 - Online Word-of-Mouth and Firm Value During a Product Recall Crisis

Liwu Hsu, Assistant Professor, University of Alabama in Huntsville, 301 Sparkman Drive, Huntsville, AL, 35899, United States of America, liwu.hsu@uah.edu, Shuba Srinivasan

Product recalls: companies fear them, customers hate them, and investors pay close attention to them. In this study, we examine whether and to what extent online WOM can hurt a company's shareholder value in the event of a product recall crisis. We identify and operationalize four metrics of online WOM that may moderate the negative product recall effects: volume, valence, spread rate, and breadth. In addition, this research assesses whether online WOM effects are homogeneous across brands. Research to date has not yet considered whether the effects of online WOM are different for big versus small brands when assessing the negative impact of crisis events on firm value. This research first utilizes an event study methodology from a sample of 186 product recall announcements to quantify the effects of product recalls on abnormal returns. This research then assesses the moderating effects of online WOM and brand characteristics on cumulative abnormal returns. Findings suggest that product recalls result in significantly negative abnormal returns for firms. Furthermore, negative online WOM exacerbates the negative effects of product recall crises on firm value. The faster spread of online WOM also negatively affects firm value during product recalls. More importantly, such negative effects of the valence of online WOM on firm value are lower for big brands than small brands, indicating an insurance-like protection of shareholder value from big brands. In contrast, small brands benefit from the larger volume of online WOM, possibly due to overall brand awareness building. For managers and research alike, this study underscores the managerial relevance of tracking metrics of online WOM and identifies opportunities afforded by big brands during a product recall crisis.

■ FB03

03- Bern

Strategic Consumer and Firm Decisions in Oligopolistic Markets: Session 2

Cluster: Special Sessions

Invited Session

Chair: Przemyslaw Jeziorski, University of California-Berkeley, Berkeley, CA, United States of America, przjez@gmail.com

Co-Chair: Ahmed Khwaja, Yale University, New Haven, CT, United States of America, ahmed.khwaja@yale.edu

1 - Firm Learning and Equilibrium Selection: An Application to Retail Price Competition in the Milk Category

Brett R. Gordon, Columbia University, New York, NY, United States of America, brgordon@gmail.com, Ron N. Borkovsky

Empirical models of imperfect competition between firms typically impose the assumption that Nash equilibrium or one of its refinements generates observed behavior. However, it may not always be reasonable to assume that all observed behavior is the result of Nash play. Firms may require time and effort to learn and implement Nash strategies. Moreover, in cases with multiple equilibria, firms may also need time to develop criteria for selecting amongst them. We develop a model and estimation approach that relaxes some of these assumptions. Specifically, our model allows different equilibria to be played in different markets and time periods. Shocks to demand or costs induce firms to move from one equilibrium to another via a learning process, giving rise to an equilibrium selection mechanism. We apply the model to help explain the pricing behavior we observe in the retail milk category, which would be difficult to explain using standard models of oligopolistic price competition that assume the same equilibrium is played in all markets and time periods (e.g., Berry, Levinsohn, and Pakes 1995).

2 - Free to Choose? Reform and Demand Response in the English National Health Service

Stephan Seiler, Stanford University, 520 6th Street, San Francisco, CA, United States of America, sseiler@stanford.edu, Martin Gaynor, Carol Propper

The impacts of choice in public services are controversial. We exploit a reform in the English National Health Service to assess the impact of relaxing constraints on patient choice. We estimate a demand model to evaluate whether increased choice increased demand elasticity faced by hospitals with regard to clinical quality and waiting time for an important surgical procedure. We find substantial impacts of the removal of restrictions. Patients became more responsive to clinical quality. Sicker patients and better informed patients were more affected. We leverage our model to calculate potential benefits. We find increased demand responsiveness led to a significant reduction in mortality and an increase in patient welfare. The elasticity of demand faced by hospitals increased post-reform, giving hospitals potentially large incentives to improve their quality of care and find suggestive evidence that hospitals responded strongly to the enhanced incentives due to increased demand elasticity. The results suggests greater choice can enhance quality.

3 - Retail Entry in a Multi-Brand Environment: Empirical Analysis of Cross-Channel Revenue Effects

Scott Shriver, Columbia University, New York, NY, United States of America, ss4127@columbia.edu, Bryan Bollinger

Technological advances in digital communications have resulted in a proliferation of channels by which consumers interact with providers of goods and services. Increasingly, retailers manage a combination of geographically ubiquitous 'always on' channels such e-commerce websites, mobile applications and catalog-driven call centers, in addition to traditional 'brick and mortar' outlets. A key question of interest to marketing practitioners and academics is how to measure the economic contribution of each of these channels to the firm. Specifically, managers wish to know to what extent the various channels act as strategic complements that drive additional demand or as strategic substitutes that cannibalize one another's sales while increasing operating costs. As the operation of e-commerce channels has become standard business practice, optimal channel strategy is increasingly focused on identifying the set of physical store locations that profitably complement their digital counterparts. In this research, we use data from a North American specialty retailer to measure the revenue impact of physical store entry on existing Web and catalog channels. The study adds to the limited empirical literature on cross-channel demand effects, and is the first to consider the case of a multi-brand retailer. We develop and estimate an individual-level model that provides rich controls for unobservables and customer heterogeneity to mitigate bias concerns potentially present in existing research. We operationalize entry effects in terms of distance measures and demonstrate how our model estimates may be used to select profitable locations for new retail stores.

4 - An Equilibrium Analysis of the Effect of Consumer Brand Equity on Firm Brand Profitability

Raj Sethuraman, Professor, Southern Methodist University, 6212 Bishop Boulevard, Dallas, TX, 75205, United States of America, rsethura@cox.smu.edu, Richard Briesch, William Dillon

This research addresses three questions: What is the effect of consumer level brand equity on firm level brand profits? How does consumer equity affect other financial outcomes such as revenues and ratio of channel profits? Is revenue premium a good outcome measure of brand equity? We define consumer level equity in terms of incremental utility for the brand and assess its impact in a market consisting of two brands and one retailer. Our research approach uses equilibrium analysis supplemented with numerical analysis. Our model yields several qualitative insights: (i) investing in equity yields larger profits for the brand with higher category and brand potential; (ii) higher price sensitivity in the market diminishes the ability to get high profits through equity enhancement; (iii) the presence of a retailer significantly diminishes the profitability of equity enhancement for the manufacturer but the presence of a private label does not significantly alter the profitability; (iv) total focal brand and channel profits increase with consumer equity, representing a win-win situation for both manufacturer and retailer; (v) revenue premium measure is an excellent outcome measure for tracking movement of consumer brand equity for a given brand but it is not a strong measure for tracking variation in consumer equity across markets or categories. The managerial implications of these findings and directions for future research are discussed.

■ FB04

04- Monch

Online Markets

Cluster: Special Sessions

Invited Session

Chair: Avi Goldfarb, University of Toronto, 105 St. George St., Toronto, ON, Canada, AGoldfarb@rotman.utoronto.ca

1 - How Do Consumers Search for Products on the Internet

Chris Nosko, University of Chicago, Booth School of Business, Chicago, IL, United States of America, cnosko@chicagobooth.edu

Research into consumer search has traditionally focused either on how consumers learn prices assuming perfect knowledge of which products exist and their characteristics or assuming that consumers are familiar with all product characteristics up to an unobservable, which is uncovered as part of a search process. These assumptions have been driven in part by a lack of data on the whole search funnel. In this project, I ask how realistic are these assumptions? Using internal eBay data I am able to examine fundamental questions about the consumer search process. My panel dataset includes variation across consumers and across time, allowing me to disentagle consumer heterogeneity from product search decisions. Importantly, my dataset includes information on the search refinement process (query information and click-throughs), consideration set (what the search engine returns), and the ultimate purchase / no-purchase decision, allowing me to look at the whole purchase funnel. I use these data to classify consumers into different types and examine how these different types respond differentially to observed consideration sets. I then ask how a firm should optimally choose consideration sets when they are both a product of consumer choice and firm actions. In this case the consumer choice is what query to type in and the firm action is what results to return to the consumer. In other settings this could correspond to firm promotional activities that alter consideration sets given consumer-directed product searches.

2 - Advertising Spillovers: Field Experimental Evidence and Implications for Returns from Advertising

Navdeep Sahni, Stanford University, Stanford, CA, United States of America, Sahni_Navdeep@gsb.stanford.edu

In this paper I use data from randomized field experiments on a restaurant-search website to provide evidence for positive spillovers from advertising, whereby a firm's advertising can positively affect its competitor's sales. In this empirical context, I find that a restaurant's advertising benefits some of its competitors that serve the same cuisine. Furthermore, among individuals who browse the same number of pages, the positive spillovers occur for individuals who are exposed to the ad few times. For individuals with more ad exposure, the advertiser gains as the spillovers disappear. After discussing the empirical evidence, I show the advertising spillovers can lead to low returns for the advertiser and also affect the shape of the ad-response curve. I illustrate these effects by building a model where ad exposures increase the likelihood of both the advertiser and its competitors entering the consumer's consideration set for purchase. Because the individuals consider the competitors too, competition may increase, which allows for the possibility that the impact of the ads will be small. When ad exposure occurs multiple times, the likelihood of the individual choosing the advertiser from the consideration set increases, possibly increasing the marginal returns from advertising at low levels. Apart from explaining the low effectiveness of ads, this model also provides a mechanism causing the sales-response curve of advertising to be S-shaped. Because of inertia in consumer choice, the S-shape of the curve can be more prominent in the longer term. Going back to the experimental data, I find support for the implications of the model. Low intensity of advertising causes contemporaneous gains for the advertiser and its competitors. However, at the following purchase occasion the same ad exposures can negatively impact the advertiser as a result of high spillovers.

3 - Pricing Online Content: Fee or Free

Anja Lambrecht, London Business School, Regents Park, London, United Kingdom, alambrecht@london.edu, Kanishka Misra

Online content providers trade off between advertising and subscription revenues. They can focus on advertising revenues and forego subscription revenues, or, charge for their content and earn subscription revenues. At the same time, charging for content will likely lead to lower advertising revenues. We build a unique data set from the sports website ESPN.com to study this question. Importantly, ESPN.com offers the majority of content for free but charges a membership fee for a subset of articles. This subset varies by day and by sport. We collect data on the number of free and paid articles per day and sport, as well as the number of unique visitors, page views and time spent for each type of article per day and sport over a 12 months period. We estimate how the number of free and paid articles affects viewership of the site. We empirically quantify the impact of the number of paid articles on the increase in number of subscribers, and the decrease in total page views. Counterintuitively, we find that in periods of low exogenous demand, the firm does benefit from such charges. However, the firm does not benefit from charging for access to content in periods of high exogeneous demand. More generally, this suggests that a static policy, such as always charging for all content, or the same amount of content, may not be optimal but that instead firms should consider varying what amount of content they give offer for free or against a fee with demand.

4 - Is Crowdfunding a Marketing Tool or a Finance Tool

Avi Goldfarb, University of Toronto, 105 St. George St., Toronto, ON, Canada, AGoldfarb@rotman.utoronto.ca, Ajay Agrawal, Christian Catalini

Crowdfunding is transitioning from a curiosity to a legitimate source of early stage capital. In addition, because investors in crowdfunding projects often receive the product once the funds are raised, crowdfunding can be seen as a way to use customers to finance production. In other words, crowdfunding investments are sometimes similar to advanced purchases, thereby providing entrepreneurs with information on the potential viability of their product in the marketplace. Using data on every project funding on Kickstarter over a two year period, we examine the benefits and risks of this funding mechanism. In particular, we explore which of the funded products are successfully brought to market and what that means for the riskiness of seeing crowdfunding investments as advanced purchases. We show that those crowdfunding projects that are most successful in attracting funds (relative to expectations) are those that are most likely to fail to deliver the products as promised. This result highlights the risk of crowdfunding investments as advanced purchases. Instead, they are better seen as probabilistic advanced purchases that often fail to materialize as desirable products.

■ FB05

05- Montblanc

Advances in Retailing I

Contributed Session

Chair: Rajiv Lal, Professor, Harvard University, Soldiers Field, Boston, MA, 02163, United States of America, rlal@hbs.edu

1 - Why Superstores?

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What makes people go to superstores? Existing literature tends to focus on competitions between superstores and small supermarkets and changes in social welfare caused by the expansion of superstores. We instead analyze the positioning of superstores and develop policy implications. Superstores increase the consumer interests of rich households, double-income households, owner drivers, raw ingredients buyers (e.g. fish or meat). We also investigate how the regulations against superstores affect consumer behaviors.

2 - Internet Dependency and Intention to Shop on Bricks and Mortar: The Mediating Role of Attitudes

Hela Ayed, MaPreCoB, El Nacer 2, Tunis, Tunisia, ayed_hela@yahoo.com, Leila Chams Ben Ghacham, Mohamed Nabil Mzoughi

This study introduces Internet Dependency (ID) as a predictor of attitudes toward fashion sites and intentions to shop on bricks and mortar stores. Sample is composed of 205 Tunisians girl adolescents. The predictive influence of ID on attitudes toward fashion sites and intentions to shop on bricks and mortar and the moderating role of attitudes toward fashion sites was empirically tested using structural equation model. Results show the totally moderating role of attitudes toward fashions sites between ID and intentions to by on brick and mortar shops. ID significantly explained attitudes towards fashion site, but did not directly predict bricks and mortar intent to shop. The influence of ID dimensions on attitudes toward fashion sites was confirmed. Marketers should facilitate access to fashion sites because attitudes toward fashion sites influence purchase intentions in bricks and mortar stores. This research helps companies to know the different goals of the use of Internet, which will be highlight in their marketing strategies. They also can change the vision of adolescents who are preoccupied to use the best ways to communicate, act and how to approach others. Furthermore glamorous world can give softness to everyday life and escape from what is happened around. Limited research has been conducted to examine ID and fashion. There are still no enough studies that analyse the effects of virtual world on real world.

3 - Category Killers at the Brink

Rajiv Lal, Professor, Harvard University, Soldiers Field, Boston, MA, 02163, United States of America, rlal@hbs.edu, Jose Alvarez

"Category killers," those highly focused retailers that specialize in a category of goods including Barnes & Noble, Best Buy and Staples, were once the bane of mass-market retailers' existence. Their wide assortment, aggressive pricing, large stores, extensive store network, and deep expertise in the categories they served proved a massive competitive advantage. "For mass-market retailers that can react quickly enough, this upheaval is survivable." Today, however, these same distinguishing characteristics may prove to be the undoing of the big-box stores. We believe that retailing generally is at a tipping point, with category killers being the first significant casualties of the revolution that is occurring. Retail store asset productivity has been in decline since the start of the recession in 2007, and we believe this trend will accelerate over the coming years. The Internet has created a daunting situation for category killers, one that will eventually impact almost all of retail. The focus that made category killers so powerful in the 1980s and '90s is creating the conditions for their struggles in 2011. Clearly, this is a new world for store retailers. To compete with online competitors, retailers will need to be agile both in eliminating or downsizing categories that do not benefit from their stores' assets, and in introducing new categories that cannot be bought without the help of the core assets of their stores. An ever-evolving retailer that understands how key store-level assets can be deployed in a category to create a compelling shopping experience will separate the winners from the bankrupt over the next decade.

4 - Dynamic Time Warping for Retail Trends

Ozden Gur Ali, Koc University, Sariyer, Istanbul, Turkey, oali@ku.edu.tr, Efe Pinar

Retailers would like to identify new economic and social developments affecting their sales so as to develop strategies and tactics to exploit or eliminate them. We use Dynamic Time Warping (a method that is successfully used by the machine learning community to identify similarities in sequences–even though their timing and speed may differ) along with more traditional measures of time series similarity to automatically identify potential leading or coincident indicators of sales trends affecting particular geographies, customer segments, or categories. We experiment with the sales data of the leading retailer of Turkey, and adjust sales for price, promotion and CRM activities, seasonality and holiday effects. We dynamically combine the adjusted time series according to potential cause of the impetus, and explore whether these trends can be used to improve forecasting in addition to managerial insight generation.

5- Price Formats and the Success of Store Brands: The Mediating Effect of Trust and Fairness

Sudipt Roy, Assistant Professor of Marketing, Indian School of Business, Gachibowli, Hyderabad, AP, 500032, India, sudipt_roy@isb.edu, Sridhar Samu, Sheikha Alia

The overall objective of this research is to examine the link between unexplained price volatility due to different formats and two related but distinct constructs, trust and fairness, and look at its managerial implications. We compare two price formats - EDLP (low volatility) and Hi-Lo (high volatility). We hypothesize that consumers trust EDLP stores more, and evaluate them to be more fair. Therefore, in these stores they are expected to have a higher willingness to buy products for which retailers take on all the responsibility, i.e. the store brands (also called private labels). We expected national brands to remain unaffected by store's price format. We also examine regional differences (USA vs. India). Study 1 confirms that consumers trusted the retailer more when it followed an EDLP pricing; the effect was stronger for Indian consumers. Another interesting finding was that in the EDLP format condition, trust towards the retailer for high deal-prone American respondents was higher than moderate ones but the effect was reversed for Hi-Lo format condition. Objective of study 2 (in progress) is to examine the link between price formats, and trust and willingness-to-purchase towards store brands and national brands. As before, we hypothesize a link between high (low) price volatility and negative (positive) evaluation, but for store brands only. Extant research in related areas recognizes that consumer perceptions of trust and fairness influence relational exchanges between consumers and retailers. We expect this paper to extend our understanding of the consumer decision making, and also help mangers make pricing decisions in retail environment.

■ FB06

06- Monterosa 1

Attention, Memory, Learning

Contributed Session

Chair: Andres Musalem, Duke University, 100 Fuqua Drive, Box 90120, Durham, NC, 27708, United States of America, amusalem@duke.edu

1 - The Influence of Memory Processes on the Selection of a Result on a Search Engine Result Page

Tamara Ansons, University of Warwick, Warwick Business School, Coventry, CV4 7AL, United Kingdom, tamara.ansons@wbs.ac.uk, Norbert Schwarz

Utilising an online search engine has become a ubiquitous consumer experience. For example, according to comScore's 2013 UK Digital Future in Focus report, online UK consumers searched 161 times on average in December 2012. Indeed, the use of search engine marketing techniques like search engine optimization illustrates the importance of online search to firms. Researchers have found that features of the search engine result page (SERP) alters the likelihood of results being selected. Beyond the attributes of the SERP, we examine how consumers' memory process may guide selection. We sought to examine how SERP selection is guided by memory processes as this offers a way for marketers to make use of the existing knowledge that consumers might have in mind when conducting a search to influence a result's selection. For example, suppose a consumer was planning a trip to San Francisco. If the consumer has been researching San Francisco, certain terms (e.g., wharf) might be salient in memory because of their relevance to San Francisco. Thus, when conducting a subsequent search (e.g., for a hotel) the presence of a previously encountered term in a result option might influence the consumers' selection. We examined this possibility experimentally by presenting participants with a series of words that were studied for an ostensibly unrelated task, which was followed by a online search task that manipulated the inclusion of previously encountered words in results on a SERP. We find that when results contain words that were encountered previously, those results were more more likely to be selected. Thus, firms can utilise knowledge about what terms are salient in consumers' memories to construct result options that include these terms, increasing its likelihood of being selected.

2 - On the Cognitive Search for Consumer Preferences: Integrating Eye-Tracking and Electroencephalogram

Chelsea Wise, University of Technology Sydney, P.O. Box 123, NSW, Broadway, 2007, Australia, chelsea.wise@uts.edu.au, Rami Khushaba, Sarath Kodagoda, Jordan Louviere

Consumer neuroscience is a rapidly evolving field of marketing research that is focused on the integration and application of neuroscientific methods to the research discipline of consumer behavior. The key contribution of this paper is to complement the advancement of such research through the investigation of the human brain activity, denoted as electroencephalogram (EEG) signal, from the different brain regions while participants undertook a choice task designed to elicit preferences for a marketing product. We analyze the electroencephalogram (EEG) signals collected from the different brain regions by focusing on the study of how event-related potentials (ERPs) are modulated by the marketing stimulus and how the ERPs evolve over time. The commercially available 14 channel Emotiv EPOC wireless EEG headset was utilized and the collected EEG data was related to the specific choice options with a Tobii X60 eye tracker. Fifteen participants were recruited for this experiment and were shown 57 choice sets; each choice set described three choice options. Our results indicate significant brain activity on the frontal (F3 and F4), parietal (P7 and P8), and occipital (O1 and O2) regions, with ERP shifts along these regions. Our experimental results also show that participants spent more time looking at the non-preferred items in each choice set at the beginning of the experiment (exploration mode), while reducing that time progressively to indicate significant amount of cognitive processing assigned to preferred items (exploitation mode).

3 - Is it Now or Never? Limits to Inductive Learning in Consumer Dynamic Judgment Tasks

Robert Meyer, Professor, University of Pennsylvania, Dept. of Marketing, The Wharton School, Philadelphia, PA, 19104, United States of America, meyerr@wharton.upenn.edu, Jeff (Cexun) Cai, J. Wesley Hutchinson

Consumers are often prone to error when making decisions that involve the strategic consideration of future consequences (e.g., search, financial planning). But while assumptions of dynamic optimality are likely to provide poor descriptions of infrequently-made decisions, they may nevertheless serve as a good as asymptotic characterization of frequently-made decisions where consumers have had a chance to learn. In this paper we report the findings of a program of research that has sought to define the theoretical and empirical boundaries of experiential learning in strategic decision tasks. Using data from a range of laboratory dynamic decision tasks we find wide variation in asymptotic learning abilities. At one extreme, individuals seem capable of developing nearly perfect 'as-if' knowledge of the expected value of the maximum of N draws from a distribution (a calculation central in search and bidding problems) after as little as one piece of feedback. At the other extreme, learning is almost non-existent in settings where feedback comes in the form of lost opportunities that require counter-factual reasoning. A taxonomic framework is proposed for guiding when assumptions of dynamic optimality are likely to be more or less plausible in empirical structural models in marketing applications.

4 - Experiential Quality Learning in Consumer Brand Choice

Suman Ann Thomas, Assistant Professor, Indian School of Business, AC2-2126, Level 1, Gachibowli, Hyderabad, 500032, India, suman_thomas@isb.edu, Jiang Zhiying, Surendra Rajiv

Consumers learn about the quality of a product through multiple consumption experiences from repeated purchases. In traditional learning model, a consumer is assumed to make brand choice using the overall quality evaluation that is formed based on her entire consumption history. However, behavioral literature on information processing and memory-based judgment suggests that the consumer stores not just the overall quality information (in the semantic memory) but also context specific usage experiences (in the episodic memory). While making a brand choice, she uses pieces of information from either of these memories, depending on idiosyncratic traits (such as age, gender etc.) and situational factors (such as involvement of the consumer in the choice process). She can make use of either the overall brand evaluations or the context specific product usage experience depending upon what is more salient during the shopping trip and then make the brand choice. In this paper, we propose a structural econometric model with Bayesian learning that allows the consumer to use either of these recall mechanisms while making the choice. Further, the consumers in our model have imperfect memory i.e., memory retrieval and recall occurs with errors. This explicit modelling of the imperfect memory allows us to econometrically identify and distinguish between the alternative retrieval mechanisms. The paper also attempts to empirically test hypotheses about factors (from results of experimental and MRI-based studies) that affect the recall from semantic versus episodic memory. We calibrate the proposed model using scanner panel data on laundry detergents. We find that consumers are more likely to recall past experiences rather than an existing belief while making a choice.

5- The Importance of Feature and Object Fixations in Choice-Based Conjoint Analysis

Andres Musalem, Duke University, 100 Fuqua Drive, Box 90120, Durham, NC, 27708, United States of America, amusalem@duke.edu, Martin Meissner, Joel Huber

Researchers from different disciplines have worked on the question of how attention and preference are related in everyday decisions. One stream of research has demonstrated that preferential looking takes place, i.e. that subjects focus their attention on features and objects they like. Another stream of research found evidence for mere exposure effects, showing that subjects more likely choose objects they (are forced to) pay more attention to. Bringing together that knowledge, it has been argued that attention directed and preference directed processes are connected in a positive feedback loop leading to the final decision, which means that attention gradually shifts to the finally chosen objects in the form of a cascade process. Reflecting these findings back to conjoint analysis, we explore the possibility that attention is focused on liked features and objects and attended features and objects come to be liked more. Using eyetracking technology we assess fixations for conjoint choice tasks. We then estimate a consumer utility model and find evidence of feature focus where attention to a feature amplifies its utility, increasing the utility of positive features and the disutility of negative ones. We also find evidence of object focus where attention to an object amplifies the magnitude of the utilities associated with all of its features. Furthermore, these two effects (feature and object focus) become stronger as the decision approaches. Finally, our findings underline the additional value of combining eye-tracking and choice data. In this regard, we find that a consumer choice model which includes feature and object fixations predicts holdout choices substantially better than one calibrated only based on choices.

■ FB07

07- Monterosa 2

Health Marketing II

Contributed Session

Chair: Hongju Liu, Assistant Professor, University of Connecticut, School of Business, 2100 Hillside Rd, U-1041, Storrs, CT, United States of America, hliu@business.uconn.edu

1 - How Business Cycles Affect the Healthcare Sector: A Cross-Country Investigation

Jan Meyer, Maastricht University, Tongersestraat 53, Maastricht, Netherlands, j.meyer@maastrichtuniversity.nl, Kathleen Cleeren, Lien Lamey, Ko de Ruyter

The healthcare sector has gained a lot of research interest by marketing scholars because of its high economic and social importance. While the long-term relationship between GDP and healthcare expenditures has been extensively researched to explain differences in healthcare spending between countries, the mid-term (i.e., business-cycle) perspective has currently been overlooked. In this paper, we explore the business-cycle sensitivity of both the public and private parts of the healthcare sector, and assess its long-term consequences across 27 countries worldwide. We find evidence for a variability in responses to the business cycle, both across spending sources (i.e., public vs. private) and across countries. Indeed, while consumers and/or governments consistently cut back on healthcare expenditures during economic contractions in some countries, in others private and/or public healthcare buyers have the tendency to spend more when the economy declines. Moreover, we find important long-term consequences of business-cycle sensitivity. We show that cost cuttings during economic downturns in the private part of the healthcare sector reduce the growth in the health status of the population in the long run, while public cut-backs increase the long-term growth in total healthcare expenditures. Finally, we explore a set of factors that might drive business cycle fluctuations of public and private healthcare expenditures. It emerges that a country's healthcare system and its preventive healthcare activities are influential predictors of cyclical sensitivity in the healthcare sector.

2 - Is Universal Healthcare Universally Good?

Sriram Venkataraman, University of North Carolina-Chapel Hill, McColl Bldg., Kenan-Flagler Business School, Chapel Hill, NC, 27599, United States of America, venkats@kenan-flagler.unc.edu, V. Kumar, J. Andrew Petersen

In October 2006, the state of Massachusetts mandated that all residents must purchase health insurance (commonly referred to as RomneyCare) or face a tax penalty. This study investigates the impact of the passage of RomneyCare on the demand for out-of-pocket diagnostic testing services (now covered once yearly with no co-pay under RomneyCare even when patients are asymptomatic). Using a novel group-trajectory matching estimator and 7 years of customer-level data (over 7 million appointments from 2002 to 2009) from a leading provider of out-of-pocket diagnostic testing services, we find that the law: (i) decelerated the rate at which demand for out-of pocket services increased in suburban and rural markets, and (ii) decelerated the rate at which demand for out-of pocket services decreased in urban markets. This suggests that on average the law increased the patient welfare of suburban and rural residents and reduced the patient welfare of urban dwellers relative to their peers in other states. We show that these net effects are a combination of the changes in the size of the market of insured patients (from about 10.9% uninsured in Massachusetts versus about 17.1% in the U.S. in 2006 to about 6.3% uninsured in Massachusetts versus about 18.4% in the U.S. in 2010) coupled with the adjustments in the supply of healthcare providers in response to the law. The study highlights the need to pay greater attention to the supply side of healthcare access so as to realize the gains from the passage of universal healthcare. Our results also lend credence to the inclusion of supply-side incentives in the Affordable Care Act (commonly referred to as ObamaCare) that are not part of the original Massachusetts healthcare law, as long as the incentives are targeted to the right markets.

3 - Online Health Management: A Study of Patient-Physician Communication via Social Media

Phylis Mansfield, Associate Professor of Marketing, Pennsylvania State University - Erie, 5101 Jordan Road, Erie, PA, 16563, United States of America, pmm16@psu.edu, Mary Beth Pinto

First introduced as a means of maintaining contact with current ties or reconnecting with old friends, social media has moved into the realm of business strategy, and more recently, into the area of health care (Duggan and Brenner 2013; Hawn 2009, Smith 2011). It is estimated that there were nearly 1.43 billion users of social networks worldwide in 2012, which represented an increase of 19.2% over 2011 figures. Facebook is the top networking site, with 837 million users worldwide, representing an increase of 27.4% from 2011. The United States is the leading Facebook country by number of users, with a total of 141 million in 2012 (EMarketer.com). The current study investigates the use of social media as a means of communication in an online health management context. Specifically, the study measured patients' attitudes toward emails, text messaging, and Facebook as communication media with their physician's office. The data was collected from a pediatric medical practice in the northeastern United States, surveying 245 parents or guardians of the patients. Ninety-six percent of the sample reported having access to the Internet. With regard to their interest in receiving messages about upcoming appointments via text messages or email, the mean of 5.4 for each method (1=No Interest; 7=Very Interested) indicates a favorable response. Additionally, the respondents' indicated an interest in receiving child-related health information via Facebook; means ranged from 4.7 for 'common illnesses' to 5.3 for 'answers to parents FAQ's' (both on the 1 to 7 scale above). This data, and additional results from this study, imply an acceptance of social media as a communication method between patients and physicians.

4 - Skepticism and Credulity in the Market for Healthcare Services

Eric Schmidbauer, Indiana University, 1309 E. 10th St., Bloomington, IN, 47405, United States of America, eschmidb@indiana.edu, Dmitry Lubensky

Medical overtreatment is considered a major contributor to rising costs in the United States healthcare market and statistics abound to document its existence. At the same time there is significant evidence of medical undertreatment stemming from patients' non-adherence to their physicians' orders due to a lack of trust. The co-existence of both over- and undertreatment is puzzling - the latter requires a high degree of patient skepticism while the former requires a lack thereof. We posit that the answer to this puzzle lies in two defining characteristics of the doctor-patient relationship: asymmetric information between an uninformed patient and an informed but biased doctor, and the ability of the doctor to restrict the patient's available actions. A patient consults a doctor to learn her true state of health and receives recommendations for treatment. The patient may fully expect the doctor to be biased, yet can still rationally draw inference from the doctor's prescribed action. Furthermore, a patient may reject the proposed treatment in lieu of an available outside option but often cannot induce the doctor to prescribe an "intermediate" treatment. We demonstrate that these two aspects of the doctor-patient relationship are sufficient to simultaneously generate over- and undertreatment in a fully rational model. Although previous marketing researchers have explained non-compliance in terms of the patient's perceived costs and benefits generally or in terms of trust, none have explicitly modeled the role of asymmetric information in determining these.

5- The Path to Drug Choice: Paved with Promotion or Persistence?

Niels Holtrop, PhD Student, University of Groningen, P.O. Box 800, Groningen, 9700 AV, Netherlands, n.holtrop@rug.nl, Jaap Wieringa, Maarten J Gijsenberg, Philip Stern

Physicians have a special position in the pharmaceutical market: they function as gate-keepers between patients and pharmaceutical firms. Their decisions whether and what to prescribe to patients influence the overall sales and hence drive the success of a drug. These decisions are amongst others influenced by marketing actions (such as detailing), the structural persistence of physicians and physician characteristics (Janakiraman et al. 2008; Kremer et al. 2008). However, which of these forces is the deciding factor remains a scarcely researched question. We study this question using a longitudinal dataset containing the prescription and detailing histories for a panel of physicians for branded and generic drugs in ten categories. Moreover, firms in these categories are engaged in a comarketing agreement: the companies market the same chemical under a different brand name. By controlling for product differences in this way, we isolate the contribution of marketing actions, structural persistence and physician characteristics on the prescription choice. Subsequently, we investigate two strategic choices firms make with respect to drug development and detailing that potentially influence the choice drivers, and judge their effects on drug prescriptions. We study whether firms benefit from developing the drugs themselves or whether they should follow other firms instead, and whether they should detail a few physicians a lot or take a broader approach to detailing. We use a hierarchical Bayesian multinomial logit model, which allows us to study the choice behavior of individual physicians. This way our recommendations for firms can be specified to the individual level, leading to truly individual marketing.

■ FB08

08- Edelweiss

Price Competition I

Contributed Session

Chair: Daniel Halbheer, University of Zurich, Plattenstrasse 14, Zurich, 8032, Switzerland, daniel.halbheer@business.uzh.ch

1 - Cognitive Dissonance and Price Competition

Huihui Wang, Duke University, 2608 Erwin Rd. Unit410, Durham, NC, 27705, United States of America, hw59@duke.edu, Wilfred Amaldoss

Consumers experience cognitive dissonance when they hold incompatible cognitions in their minds. In this paper, we incorporate the idea of cognitive dissonance in a model of spatial competition and examine its implications for pricing strategy. Prior research has shown that in the presence of demand uncertainty or information asymmetry it is more profitable for a firm to advance sell its products rather than spot sell them. We show that even in the absence of demand uncertainty and information asymmetry, advance selling is more profitable if consumers are susceptible to cognitive dissonance. Traditionally, consumers pay a lower price for product bundles. Yet the prospect of cognitive dissonance can motivate consumers to pay a higher price for a bundle than the sum of the prices of its components. We also identify circumstances when it profitable for the firm to engage only in advance selling, and when it is profitable for the firm to offer consumers the option to advance buy as well as spot buy.

2 - Fattening Competition

Paul Dobson, Norwich University of East Anglia Business School, Norwich Business School, Norwich, NR4 7TJ, United Kingdom, p.dobson@uea.ac.uk, Eitan Gerstner, Jonathan Seaton, Ratula Chakraborty

Is competition resulting in more choice always good for consumers? This paper considers the phenomenon of supersizing unhealthy foods where food vendors compete by offering significant quantity discounts on larger portion sizes over regular sizes. Healthcare experts believe that increases in portion sizes, and particularly the emergence of extra-large, supersized portions served by food vendors, have contributed significantly to the obesity epidemic. The paper shows how competition can encourage food companies to offer different portion sizes on their menus and entice price-conscious consumers to trade up to supersized portion sizes and overeat while penalising health-conscious consumers with high prices for sticking to regular portion sizes. The bargain prices offered for supersizing can be so generous as to be below their incremental cost and result in a loss of economic welfare; a feature which intense competition can exacerbate. Aside from the impact of obesity on healthcare costs, the prospect of an economic welfare loss provides a further justification for pressuring food vendors to reduce supersizing for unhealthy food. The paper assesses possible policy measures and business responses to counter the harmful effects of supersizing and encourage consumers to consume in moderation. As well as measures related specifically to portion sizes, the paper considers broader, structural measures that might beneficially affect the nature and intensity of competition between food vendors, including planning and licensing restrictions that could provide for variety and choice while curbing the excesses of fattening competition arising from over-served markets with desperate competitors.

3 - Product Recommendations and Price Competition

Sofian Bahani, Koc University, Rumelifeneri Yolu 34450 Sariyer, Istanbul, Turkey, sbahani@ku.edu.tr, Skander Essegaier

This paper studies the strategic implications of the use of recommendation systems by competing retailers. We develop a game theoretical model to explain how product recommendations enable competing retailers to reduce the intensity of price competition and generate higher profits. Our model captures, in a stylized way, some key features of the competitive setting in book retailing on the Internet (Amazon.com vs. Barnesandnoble.com). We consider two retailers serving their own store-loyal customers while competing over store-switchers. Both retailers carry a similar assortment of products that are imperfect substitutes (e.g., gardening bBooks). All consumers, both 'store-switchers' and 'store-loyals,' have heterogeneous preferences over these items. Store-loyals are addressable in a way that switchers are not: each retailer has the ability to send its own store-loyals a recommendation. Building on evidence from the behavioral literature that indicate that recommendations can increase preference, we show that in equilibrium, both retailers recommend the same subset of items to their respective loyals. This is because retailers who recommend the same items have the same incentive to raise prices for the recommended items, thereby taking advantage of the enhanced preference and the larger demand stemming from their store-loyals customers for these items. As a result, competition between the two stores to sell the recommended items to store-switchers would be muted. Stores competition for the non recommended items, however, would be more aggressive and price would decrease. Overall, we show that both retailers achieve higher profits.

4 - Self-Serving Behavior in Price-Quality Competition

Daniel Halbheer, University of Zurich, Plattenstrasse 14, Zurich, 8032, Switzerland, daniel.halbheer@business.uzh.ch, Marco Bertini, Oded Koenigsberg

Managers like to think well of themselves, and of the firms that employ them. However, positive illusions can bias a manager's evaluation of market outcomes, self-servingly crediting success on the superior quality of one's own product but blaming failure on the aggressive price of a competitor's offering. These distorted attributions stem from the idea that product quality better serves the manager's motivation for self-enhancement and self-presentation than price: product quality is seemingly more central to the firm, less susceptible to external market forces, and more stable over time. We position our theory in the psychology of attribution, define self-serving behavior and provide experimental and survey evidence of this phenomenon, and develop a model of price-quality competition that incorporates the empirical findings. In particular, we first study the natural benchmark equilibrium provided by unbiased decision makers. We then introduce self-serving behavior in the presence of myopic principals, or of forward-looking principals who anticipate the limitations of managers and set first-period decisions accordingly.

■ FB09

09- Mimosa

Media Channels

Contributed Session

Chair: Tiffany Ting-Yu Wang, Associate Professor, School of Informatics, KNU, No.1 Kainan Road,Luzhu Shiang, Taoyuan, 33857, Taiwan - ROC, tiffanyt.wang122@gmail.com

1 - Are Small Media Under-Utilized?

Steffi Frison, PhD, KU Leuven, Naamsestraat 69, Leuven, Belgium, steffi.frison@kuleuven.be, Peter De Maeyer, Christophe Croux, Marnik G. Dekimpe

Advertising remains one of the most popular marketing instruments, and many studies have looked at its sales effectiveness. However, most studies either looked at the total spending of a brand/firm (van Heerde et al., JMR 2013), or focused on the most popular media, such as TV and newspaper/print (Deleersnyder et al., JMR 2009). As such, little is known on the effectiveness of "smaller" media, such as billboard and cinema advertising. In spite of their lower share, huge amounts are still spent on these media. ZenithOptimedia reports 2012 worldwide values of over 32,200 and 2,700 million dollar, respectively. Also, while some brands never use these smaller media, others spend over 10 percent of their budget on them. In this study, we focus on these smaller media, and address questions such as: (i) are they more or less prone to be cut back during economic downturns than other media, (ii) what is their relative effectiveness, both in the short and long run, and would this warrant a higher proportion of the total budget?, (iii) if so, for what brands and/or product categories?, and (iv) do synergy effects exist between these "smaller" media and the more popular ones, which could be another motivation for a more intense usage (Naik and Raman, JMR 2003). To address these questions, we conduct a large-scale empirical investigation involving the advertising spending history of over 200 CPG brands across both major and smaller media. To separate short- and long-run effectiveness, we build on the error-correction specification described in van Heerde et al. (JMR 2013), which we augment to capture potential synergy effects (Naik and Raman, JMR 2003). Moreover, we explicitly account for the fact that the selective use of these smaller channels may be endogenously determined.

2 - Optimizing Cross Channel Media Decisions: An Empirical ROI Comparison

Justin Kim, Managing Partner, Analytics, Sapient (m)PHASIZE, 15 Ketchum St., Westport, CT, 06880, United States of America, jkim5@sapient.com, Ryan Stewart

Integrating online and offline media strategies is becoming more critical to today's marketers. Hence, central to marketing/media mix analysis are cross media interactions, their synergistic effects, the resultant impact on ROI and media spending optimization. It is well documented that any bias induced by misspecification of cross effects in the model can cause inaccurate estimate of ROI. The recent developments in marketing science literature show three different model formulations of cross media effects; Bayesian Dynamic Linear model (Dinner, et al. 2011), Vector Autoregressive Model (Pauwels, et al. 2012), and Structural Equation Model (Yamamoto & Matsumura, 2011). This paper studies empirical comparisons of the above three model formulations by employing the data from five different industries, financial, insurance, retail, electronics and FMCG. The results may shed light on (1) cross validation of different statistical techniques in terms of model performance, and (2) what business insights and learning can be generalized across industries. In addition, the meta analysis aims to suggest how some of the discrepancies and contradictions can be interpreted from managerial standpoint of view and also to discuss how each model formulation can improve by utilizing different model specification from real-world data.

3 - Direct and Indirect Effects of Print Media Covert Advertising on Sales of Consumer Durables in China

Xia Wang, Renmin University of China, 59 Zhongguancun Street, Beijing, China, wangxia@ruc.edu.cn, Lily Dong, Chunling Yu

As a result of the diminishing effectiveness of traditional advertising, firms are increasingly turning to covert advertising to promote goods and services in today's marketplace. Covert advertising is a form of communication that involves marketing activities that embed brand information into outlets not typically considered advertising terrain, which has attracted great interest from academics and practitioners and been widely used in various media outlets. However, the literature reveals little evidence on whether these investments pay off and no one has answered the question of how or if covert advertising in print media can help generate sales. The current research uses a longitudinal daily data of consumer durables in China to study the extent to which covert advertising in print media influences sales. The results provide support to the hypothesis that print media covert advertising has positive impact on firms' sales. In addition, covert advertising has dual effects on sales: the direct effect through its original copy, and the indirect effect through the online exposure. The authors offer directions for further empirical research and implications for covert advertising management.

4 - Impact of Goal Orientation and Interpersonal Connectivity on Social Media Advertising

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Previous research has verified the enhancement of persuasive message effectiveness by the regulatory fit between goal pursuit strategy and a person's goal orientation or regulatory focus. In SEM analyses of the data from a mid-size sample online survey, prevention-orientation and talking/sharing experiences of visitors to Facebook were found to respectively decrease and increase irritation reactions to advertisements on this site. The regulatory fit between prevent-orientation and talking/sharing experiences with FB positively increases interpersonal connectivity as shown in this study. This research has also manifested the positive impact of socialization, community connection, and utilitarian experiences with FB in general on favorable reactions to ads. Nevertheless, interpersonal connectivity was found to negatively moderate this positive impact of such engagement experiences on reactions to ads. Furthermore, interpersonal connectivity is found to positively moderate the highly significant positive relationship between general FB utilitarian experience's contribution and its sustainability fans' webpage utilitarian experience.

5- Online Search for Health and Medical Information: What Makes it More or Less Likely?

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We draw on the extant literature on consumer information search behavior and propose several factors that will affect online health and medical information search. Among other findings, we find that individuals who search online are healthier indicating that the information online is used as much to maintain good health as it is to resolve health and medical issues. In addition, individuals always turn to the online environment for information no matter what health and medical decision making process they are using. Furthermore, individuals do not see online information as a substitute but as a supplement for the information from their health care provider. We also find that the most important factor driving individuals to search online is the perceived benefits derived from the health information obtained. We conclude by providing several recommendations on how the health and medical websites could better serve the needs of the online users.

■ FB10

10- EMBA 1

Longterm Effects of Branding

Contributed Session

Chair: Cem Bahadir, University of South Carolina, 1705 College Street, Columbia, SC, 29208, United States of America, cem.bahadir@moore.sc.edu

1 - Consumer Choice and Brand Performance under the WIC Program: Short-Term versus Long-Term Effects

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The Special Supplemental Nutrition Program for Women, Infants and Children (WIC) program provides supplemental food to low-income pregnant women, infants and children who are identified to be at nutritional risk. Participants receive vouchers to purchase from a limited set of approved products which must meet minimum nutritional requirements. The goal of the program is to improve health and nutrition amongst the beneficiaries, and to establish healthy eating habits which will persist beyond participation in the program. Manufacturers desire inclusion of their products in the program not only for the short term economic benefits, but also as a means of building long term customer relationships. While some theories of consumer behavior would support these outcomes, other theories suggest that the beneficial effects are less likely to materialize. Since the product is free to participants, brand equity, perceptions of quality and willingness to pay are likely to be negatively impacted. Negative associations may also develop because the product is part of a restricted choice set, motivating participants to revert to less healthy choices to express their freedom. Which effects dominate is an empirical question with theoretical, managerial and public policy implications. We use panel data from the ready-to-eat breakfast cereal category to investigate the impact of participation in the WIC program on consumer choices. During the program, we find that participants shift their choices toward the WIC-approved products. These gains are short-lived, as once participants exit the program their choices shift away from the WIC-approved set of products. The net effect varies with consumer demographics and brand positions.

2 - Role of Predisposition and Information on Consumer Choice and Equilibrium Market Price

Onesun Yoo, Assistant Professor, University College London, Gower Street, London, United Kingdom, onesun.yoo@ucl.ac.uk, Rakesh Sarin

The proliferation of consumer review sites and social media provides today's consumers with greater access to information about a firm's products than ever before. While information do play an important role prior to purchase, the predisposition a consumer may have about a product can often play a dominant role in the decision outcomes as it influences how the information is interpreted. Conceptualizing such interplay between predisposition and information in a consumer's purchase choice is of critical importance in marketing because the influence of predisposition, when aggregated across the consumer population, constitutes the brand equity of a firm in the market. In this paper, we present a model of consumer purchase choice incorporating the role of predisposition and information. In particular, our model shows that when a consumer is predisposed to liking a certain product, having less information about the product increases her likelihood of purchase because she is willing to give more benefit of the doubt about the product's quality when she knows less. We aggregate the influence of predisposition in the individual level to the consumer population to construct the demand curve. We investigate the pricing decisions of firms under the resulting demand curve in the monopoly setting, and find a unique equilibrium price in the competitive setting. Our model not only generalizes previous results on pricing decisions under brand loyalty, but also presents novel insights into how the shape of heterogeneity in the predisposition levels in the consumer population impacts the firm's pricing decisions. We discuss the explanatory power of our model and results.

3 - Short Life Cycle of an Experience Product's Long Life: A Bayesian Approach via Signaling Strategy

Goksel Yalcinkaya, Assistant Professor of Marketing, University of New Hampshire, 10 Garrison Ave, Durham, NH, 03824, United States of America, goksel.yalcinkaya@unh.edu, Tevfik Aktekin

An experience product's quality is difficult to assess prior to purchase, largely due to the limited availability of information before consumption. In the absence of information, firms routinely use certain market signals to provide product quality information to consumers. Accordingly, this research proposes Bayesian models with both deterministic (via covariates) and probabilistic effects (via individual successive product release effects) to examine how certain signals can be used by firms to convey unobservable product quality information to consumers. The results of this study, based on the motion picture industry data, indicate that there are critical milestones for launching long lasting products. We show that consumers perceive the continuity of core product attributes as quality signals, particularly for early installments. Further, we find strong evidence of a positive relationship between shorter time lag of releases and performance. However, the results also indicate that, for a small fraction of products, too short of a time lag between releases affects the performance in a negative manner. Furthermore, our findings reveal that the "brand" support diminishes its importance after several successive introductions.

4 - Acquiring Portfolios of Customers, Brands and Technology: When Do They Pay Off?

Cem Bahadir, University of South Carolina, 1705 College Street, Columbia, SC, 29208, United States of America, cem.bahadir@moore.sc.edu, Sundar Bharadwaj

Firms accumulate market-based assets such as brands, customer relationships or technology to enhance their competitive advantage in the market place by acquiring other firms. The changes in these assets should signal the 'quality' of the firm's future cash flows to investors because brand, customer, and technology assets enable firms to introduce successful new products, achieve customer loyalty, and charge premium prices. Surprisingly, investors tend to react unfavorably towards mergers and acquisitions (M&As). On average, acquirer firms' shareholders experience wealth loss following an M&A announcement. In this study, the authors investigate investors' reactions to changes in the firms' acquired market-based assets using a novel panel data set that tracks the acquired market-based assets over time. The findings indicate that the stock market reacts favorably to changes in individual assets, but does not react positively to simultaneous changes in the asset portfolio. This result suggests that investors perceive adverse selection and post-acquisition integration challenges to be more important than potential synergies among the portfolio of market-based assets. However, the negative reaction is mitigated for firms with two learning mechanisms, namely greater acquisition and partnering experience that enable them to better select and integrate the portfolio of market-based assets.

■ FB11

11- EMBA 2

Choice Model Designs

Contributed Session

Chair: Fred Feinberg, University of Michigan, Ross School of Business, 701 Tappan St., Ann Arbor, MI, 48104, United States of America, feinf@umich.edu

1 - A Monte Carlo Study of Design Procedures for the Nonparametric Mixed Logit Model

Andreas Falke, University of Regensburg, Universitätsstr. 31, Regensburg, Germany, andreas.falke@wiwi.uni-regensburg.de, Harald Hruschka

We determine efficient designs for choice-based conjoint analysis using the nonparametric mixed logit model which captures latent consumer heterogeneity in a very flexible way. Different methods generating one or multiple designs are tested. Additionally we apply Halton draws and determine a minimum potential design for prior draws to reduce computation times caused by accounting for latent heterogeneity of consumers. As main design efficiency criteria we consider a measure related to D-error and entropy. As additional benchmarks we generate designs both randomly and by an approach which starts from orthogonal designs developed for linear models. We compare these design procedures by simulating choices for different constellations on the basis of the nonparametric mixed logit model. Using these simulated choices we estimate parameters of the nonparametric mixed logit model in the next step. ANOVA with root mean squared error between estimated and true coefficient values as dependent variable shows that a less complex entropy-based design procedure performs about as well as a procedure which aims to produce ten D-optimal designs. On the other hand, random designs and procedures generating one design on the basis of the D-error related measure and by the approach starting from an orthogonal design are significantly less accurate.

2 - Estimating Individual-Level Choice Model Parameters: A Comparison of Econometric Approaches

Andrei Strijnev, Assistant Professor, University of Texas at Dallas, 800 Campbell, Richardson, TX, 75080, United States of America, strijnev@utdallas.edu, Seethu Seetharaman

We focus on the estimation of individual-level choice model parameters using individual-level choice data. For this purpose, we use two different datasets which contain large series of observations from each respondent that allows us to reliably estimate individual-level choice model parameters, referred to as true individual-level choice model parameters, for each respondent. We then compare the relative abilities of three commonly used Estimation Approaches on pooled choice data across respondents: (1) Latent Class Approach, (2) Random Effects Approach, and (3) Hierarchical Bayes, Random Effects Approach, in the recovery of the individual-level choice model parameters, explanation of the observed choice outcomes in the estimation sample, as well as the prediction of individual-level holdout choices, at various levels of available degrees of freedom for estimation. We find that all three approaches fare well in terms of closely recovering the true individual-level choice model parameters, explaining individual-level choices in the estimation sample, as well as predicting holdout choices, especially when compared to a pooled approach that ignores heterogeneity in choice model parameters across respondents. In fact, the pooled approach does poorly, when compared to the three approaches, even in terms of estimating the average values of the choice model parameters across individuals. Further, we find that the Latent Class Approach fares the best among the three approaches in terms of parameter recovery, model fit and holdout prediction, outperforming them in terms of holdout predictions even in data-sparse estimation conditions.

3 - Habitual Choice and Model of Dynamic Screening

Hyeyoung Yoo, Korea University, 145, Anam-ro, Seongbuk-gu, Seoul, Korea, Republic of, myhy0929@korea.ac.kr, Jaehwan Kim

In market, people's behaviors are repeated day by day. in the study of Quinn & Wood in 2005, they mentioned that about 45% of people's daily behaviors were repeated. These behaviors are called "habits," and "habits" often affects choices over time. Thus indentifying and targeting habitual customers can lead marketers to more efficient spending on marketing activities. Quite a few research have been done to deal with habitual choice. However, most of the marketing studies focused on the 'consequence' of the choices from the habits, not how habitual choice was formed or where it is from. In this study, we attempt to explain how habit affects consumer's decision-making process, through the screening model(e.g., Gilbride and Allenby 2004). Weekly conjoint data during 12 weeks were used to observe habitual choice, and the parameters of dynamic screening model were estimated in the hierarchical Bayesian framework. Managerial implications learned from the heterogeneous habitual buying are discussed including the configuration of efficient promotional program. Key Words: non-compensatory decision, habitual choice, screening rule, dynamic choice.

4 - Evaluating Efficiencies of Conjoint Choice Experiment Designs

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Stefanie Biederman, Min Yang

Conjoint choice experiments are widely used in testing customer acceptance of new product designs, in product positioning, and in assessing the appeal of advertisements. An efficient design not only save sample size, but also accelerate the process of new product development. How do we derive a highly efficient design? Although there are some algorithms available for searching for a good design, none of them can derive a global optimal design. Among the available algorithm, the most popular one is the coordinate-exchange algorithm, which has proven fast and efficient in the context of new product development. The coordinate exchange algorithm depends on the initial design. The commonly used approach in current literature is to start with many (e.g., 1,000) initial designs and choose the best result among all trials. While it is true that the higher number of initial designs one choose, the more efficient the resulting design, the computation time can be extremely long. A moderate conjoint choice design could take days or even weeks to run. However, one does not really know that the derived design is efficient unless one tries every single design as a starting point. This is impossible even for a very moderate set up, not to mention real world new product design problems where there can be many attributes and many levels of each attribute. To address these limitations, we develop an approach of evaluating the efficiency of a given design. The approach can serve as a guidance of constructing highly efficient design without using a large number of initial designs. We discuss some numerical results and also implications of this approach on new product design and clinical trial designs.

5- Correcting for Covert Selection Processes in Consumer Evaluations

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A common goal in marketing research is to understand how one evaluates products that have been filtered through some type of screening or selection process. Typical examples include post-choice satisfaction ratings, certain free recall tasks, or the development of consideration sets followed by brand choice. In such situations, behavior is contingent not only on the alternatives being evaluated, but the choice context in which they have become available, creating differing degrees of selectivity. In this paper, we consider situations in which a polytomous selection process limits which items offer up subsequent information. We propose that not flexibly modeling the correlation between choice and evaluation across conditions can lead to systematic, erroneous interpretations of covariate effects on evaluation. We illustrate this by examining two experiments in which subjects choose among, and then evaluate, a frequently-purchased consumer good, as well as data first examined by Ratner, Kahn and Kahneman (1999). Results indicate not only strong selection biases, but that traditional specifications of the choice process–presuming selection bias does not vary across choice contexts–can lead to markedly different interpretations of variable effects. Our findings show that the size and composition of a choice set affects the degree of correlation between choice and evaluation, and further suggest that foregone alternatives can play a disproportionate role in selectivity. Moreover, failing to account for selectivity across experimental conditions, even in well-designed experimental settings, can lead to inaccurate substantive inferences about consumers' choice processes.

■ FB12

12- Geneve

Information Asymmetry

Contributed Session

Chair: Pinar Karaca-Mandic, Assistant Professor, University of Minnesota, 420 Delaware Street SE, MMC 729, Minneapolis, MN, 55108, United States of America, pkmandic@umn.edu

1 - Optimal Incentives in Cross Selling: An Economic Approach

Andre Decrouppe, Vienna University of Economics and Business, Thalwil, Switzerland, andre.decrouppe@gmx.de

Cross-selling is the practice of selling additional products to an existing customer. It has the potential to boost revenues. Both the company and the customer benefit from cross-selling. For many multi-divisional companies with product or service oriented organizational structures the attempt to realize the benefits of cross-selling generates incentive-problems. We identified three problems spread over three business levels. Firstly, in most instances the management underestimates the self-interest of business units and the effect of incentives. Secondly, managers often tend to underrate the fear of the business units of dissatisfying their key accounts by selling unfamiliar products to them and thereby to risk their mutual trust relationship. Finally, there is an apprehension that a business unit might act opportunistically by selling products or services of the other business units without added value to the customer, in order to increase their short-term payment. In parallel the unit could jeopardize the future business with the customer and in consequence the company's revenue. We analyze the different incentive problems by applying principal agent theory and the theory of repeated games. In this way we bridge between business administration and economics. The paper proves that the companies manage these issues best by offering the right level of (monetary) incentives. The need is known but adequate and cross-divisional incentive structures are often lacking in current business practice, here amendments shall take place.

2 - Consumer Preferences for Ambiguity over Time

Ayse Onculer, Professor of Marketing, ESSEC Business School, Ave. Bernard Hirsch, Cergy, 95021, France, onculer@essec.fr, Yuanyuan Liu

Previous research reports that consumers are generally ambiguity averse for high probabilities but they are ambiguity seeking for low probabilities. Since risky and ambiguous prospects are usually unresolved until some future date (the success of new product investments, mergers, consumer products purchased for the home, etc.), the current study examines the impact of time on ambiguity preferences. Our experimental results show a robust effect of time: temporal distance mitigates ambiguity-seeking behavior at low probabilities and ambiguity-aversion at high probabilities. This effect is consistent across different probabilities, ambiguity levels (variance around a fixed probability), temporal distances and methods in eliciting ambiguity attitudes (choice task and probability-ambiguity tradeoff task). We propose two underlying processes that may produce such an effect: (1) temporal distance shifts individuals' focus from feasibility (probabilities) to desirability (outcomes), leading to indifference towards ambiguous and unambiguous prospects with comparable outcomes, and (2) temporal changes in anticipated disappointment (elation) impact ambiguity preferences. Resolution in the present, with its immediate gains and losses, heightens anticipated emotions that encourage ambiguity aversion for higher probabilities and ambiguity seeking for lower probabilities. However, future resolution reduces reliance on anticipated emotional responses and thereby tempers the extremity of ambiguity preferences. The implication is that present-oriented decision frames inflate ambiguity preferences by stimulating affect and/or making people focus on the probability information of a prospect. Decision-makers may control for these tendencies by enlisting more future-oriented frames.

3 - Signaling Effects of Critics

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One cause of imperfect or asymmetric information is the fact that information gathering is conjoint with costs, which may lead to rudimentary information search by market participants. Experience goods represent an example par excellence for the presence of information asymmetry among consumers, as they are characterized by the consumer's a prioi lack of information about a product's quality before consumption. An effective way of reducing information asymmetries is the transmission of a credible signal. Critical statements of reviewers about the quality of a product or service represent such a signal and can have a significant impact on unit sales. With the help of her expert reputation and consequently her high credibility and reliability, critics have direct influence over her readers and accordingly on product demand. In order to empirically verify the influence of critic reviews on market success, we put together a dataset consisting of a sample of 1770 video games and their sales figures between 2004 and 2010. We concentrate our analysis on five console and handheld devices. The video game reviews came from the internet portal Metacritic, a website that reviews entertainment products on the basis of a weighted average of mainstream critical responses. First regression results confirm the signaling effect of critics on market sales. Metacritic review scores are positive statistically significant. The statistical significance remains if word-of-mouth reviews are added to the analysis. Although our findings and results are preliminary, we provide strong empirical evidence that critics take the position of an influencer. Their reputation effects serves as a signal that helps consumer to clarify their uncertainties and consequently support their decision making process.

4 - The Role of Agents and Brokers in the Market for Health Insurance

Pinar Karaca-Mandic, Assistant Professor, University of Minnesota, 420 Delaware Street SE, MMC 729, Minneapolis, MN, 55108, United States of America, pkmandic@umn.edu, Roger Feldman, Peter Graven

Health insurance markets in the United States are characterized by imperfect information, complex products, and substantial search frictions. Insurance agents and brokers play a significant role in helping employers navigate these problems. However, little is known about the relation between the structure of the agent/broker market and access and affordability of insurance. This paper aims to fill this gap by investigating the influence of agents/brokers on health insurance decisions of small firms, which are particularly vulnerable to problems of financing health insurance. Using a unique membership database from the National Association of Health Underwriters together with a nationally representative survey of employers, we find that small firms in more competitive agent/broker markets are more likely to offer health insurance and at lower premiums. Moreover, premiums are less dispersed in more competitive agent/broker markets.

■ FB13

13- Luzern

Finance and Marketing II: Market Assets

Contributed Session

Chair: Alexander Edeling, PhD Student, University of Cologne, Albertus-Magnus-Platz, Cologne, 50923, Germany, edeling@wiso.uni-koeln.de

1 - How Do Stock-Market Sentiments Affect Product Category Demand? Case of Organic and Virtue Products

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This study examines the effects that stock market sentiments have on consumer demand in selected product categories. While the business press is replete with claims such as "stock prices and aspirin sales are inversely related"such claims have so far remained speculations and have "never been formally studied" (cnbc.com). To fill this research gap, we concentrate on two product categories, in which we hypothesize stock market sentiments to have influence on consumer demand. The first focal category is organic vs. non-organic products (e.g., Van Doorn and Verhoef 2011). The second focal category is virtue- vs. vice-related products (e.g., Hui, Bradlow, and Fader 2009). Regarding stock market sentiments, we focus on bull vs. bear sentiments (i.e., upward vs. downward movements in stock prices) (e.g., Baker and Wurgler 2007), as well as on stock-market fear vs. confidence (i.e., the VIX index; Frazzini and Lamont 2008; Whaley 2000). In summary, our research question is: How are the demand patterns of (1) organic vs. non-organic products and (2) vice vs. virtue products affected by the stock market's (a) bull vs. bear sentiment and (b) fear vs. confidence? To investigate these questions, we examine retail-store level scanner data from a large U.S. retail chain, and link it to stock market data. Our product category demand data comes from a panel of households shopping in the northeast US region (multiple states) for a period of 6 years from January 2006 to December 2011. We analyze the data with a vector autoregressive (VAR) estimation model. We find that positive (vs. negative) stock market sentiments as well as stock market fear have differential effects on the demand patterns of organic (vs. non-organic) and vice (vs. virtue) products.

2 - Customer Satisfaction and the Cost of Capital

Martin Artz, University of Mannheim, Castle, Mannheim, Germany, martz@bwl.uni-mannheim.de, Marwan El Chamaa, Holger Daske

There is mounting evidence documenting that customer satisfaction is related to shareholder value. However, the precise underlying mechanisms of this link are less well understood. Especially the effect of customer satisfaction on one specific driver of firm value–the cost of equity capital–has not been analyzed yet. This is remarkable given its frequent use in marketing decision models, for instance customer lifetime modeling, as a discount factor. We argue that a reason for this gap might be measurement challenges and offer an accounting-based implied cost of equity capital measure as a solution. This measure is defined as the internal rate of return that equates the current stock price to the present value of the market's expected future residual flows to shareholders. Expected flows are taken from financial analysts' expectations close to the point in time when new customer satisfaction data is available. To mitigate concerns of potential analyst failures, we additionally forecast future earnings by a vector-autoregressive forecasting model. Customer satisfaction data is taken from ACSI, using a cleaning procedure which extends that of Ittner, Larker, and Taylor (2009). Both approaches–analyst expectations and forecasting parameters– show that firms with higher customer satisfaction exhibit lower cost of equity capital, controlling for a large set of covariates and different econometric specifications. We further find that both forecasted and realized following 12-months stock returns are not significantly related to customer satisfaction, underlining the missing usefulness of stock returns as a measure for cost of capital (Hughes, Liu, and Liu 2009). The economic effect of customer satisfaction is small, but economically still meaningful.

3 - Disclosure of Customer Metrics, Analysts' Behavior and Financial Performance

Kapil Tuli, Associate Professor of Marketing, Singapore Management University, 50 Stamford Road, Singapore, Singapore, kapilrtuli@smu.edu.sg, Bernd Skiera, Emanuel Bayer

Over the last few years a large body of literature in marketing has examined the effects of changes in customer related metrics on investors' perceptions of future cash flows. Although many authors of this literature call for more disclosure of customer metrics, little research in marketing examines the antecedents and consequences of the disclosure of these metrics. This is surprising as empirical research in this domain is likely to lead to findings that are of importance for investors, financial analysts, policy makers, and top managers of a firm. Interestingly, popular media indicates that managers are opposed to greater disclosure of marketing related actions and/or assets as such information can easily be used by competitors and therefore result in adverse financial consequences. Accordingly, the primary objective of this presentation is to examine the antecedents and consequences of the disclosure of customer related metrics. Using multiple data sources, we examine 360 annual reports of 56 publicly-listed US firms in the telecommunication industry over 17 years for disclosures of customer related metrics. We analyze what types of firms disclose which kind of customer related metrics under what kind of economic conditions. In addition, we examine if the disclosure of customer related metrics is correlated with higher analysts' following as well as lowering analysts' forecast errors and dispersion. Finally, we analyze whether greater disclosure of customer related metrics is likely to have an adverse effect on financial performance of a firm as argued by managers who oppose greater disclosure of marketing actions and/or assets.

4 - Marketing's Impact on Firm Value – What Do We Know?

Alexander Edeling, PhD Student, University of Cologne, Albertus-Magnus-Platz, Cologne, 50923, Germany, edeling@wiso.uni-koeln.de, Marc Fischer

Since the demand for the financial accountability of marketing programs is still increasing in capital market oriented firms, both researchers and managers are eager to know whether marketing actions (e.g., advertising) or assets (e.g., customer equity) have higher value relevance. A quantitative approach that integrates the extant research findings and establishes empirical generalizations concerning the impact of marketing actions and assets on firm value is still lacking. We fill this research gap by conducting a meta-analysis of prior econometric estimates of the impact of marketing variables on firm value. As effect size, we use the marketing firm value elasticity, i.e., the percentage change in firm market valuation due to the percentage change in a marketing variable. This metric is easy to interpret and helps comparing findings from studies with different measures of firm value (e.g., market capitalization, Tobin's q and stock return) and marketing (e.g., advertising expenditures, customer satisfaction). Based on 430 elasticities drawn from 70 datasets across 73 studies, we find an overall mean elasticity of 0.36. We also show that elasticity estimates are significantly higher for marketing asset variables than for marketing action variables, indicating that investors put greater emphasis on variables that are closer to actual market performance. Furthermore, the study reveals the moderating effect of various research characteristics related to model, data, time, industry, geography and publication status. These findings help marketing finance researchers to calibrate their study set-ups and check the plausibility of their findings.

5- Understanding Price-to-Earnings Ratios of High-Growth Firms with Customer Metrics

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Fundamental comparative analyses of firms often use the price-to-earnings ratio as a key financial metric. This ratio focuses on the price, also known as market capitalization or equity value of the firm, and on earnings. It is used in various merger and acquisition (M&A) situations, initial public offerings (IPO), restructurings, and investment decisions. Despite its great practical relevance–the price-to-earnings ratio is still the primary valuation metric among practitioners–its link to changes in marketing success, reflected in changes of customer metrics, remains unexplored. This article develops a model to relate customer metrics (retention rate, acquisition costs, profit per customer, and number of acquired customers) to the price-to-earnings ratio. The model shows that improvements in customer metrics have non-intuitive and surprising effects on the price-to-earnings ratio. Furthermore, this research shows that high-growth firms' price-to-earnings ratios follow just two shapes over time. These shapes allow for relatively easy interpretations of highly positive and even negative price-to-earnings ratios among high-growth firms. An empirical analysis of NASDAQ 100 firms' price-to-earnings ratios confirms the shapes. Also, the empirical analysis shows that models with customer metrics predict future price-to-earnings ratios more precisely than traditional models used in accounting research. The link of customer metrics to price-to-earnings ratios thus enables a better understanding of their implications and helps narrow the gap between marketing and finance.

■ FB14

14- Zurich

Organizing for Innovation

Contributed Session

Chair: Hyun Jung Lee, Ewha Womans University, 11-1 Daehyundong, Sudaemungu, Seoul, Korea, Republic of, hyunjunglee30@gmail.com

1 - The Impact of Corporate Ownership on Innovation

Sourindra Banerjee, Assistant Professor, University of Warwick, Warwick Business School, Coventry, CV47AL, United Kingdom, sourindrab@gmail.com, Jaideep Prabhu, Gerald J. Tellis

Does a firm's focus on maximizing shareholder value help or hurt innovation? Do firms with other forms of ownership (state, family) do better or worse in terms of driving innovation? In the absence of systematic research on these questions, we examine more closely the relationship between family, state, foreign and widely-held ownership and innovation. To do so, we develop a theory about how risks and resources drive firms with different types of ownership to focus on different types of goals and hence on different levels of innovation over time. Our theory also examines the role that management involvement plays in moderating the influence of ownership on innovation. We test our hypotheses using panel data from 2001 to 2011 on major Indian firms in the banking, oil and gas, power, metal and capital goods sectors. The results show that firms with greater family and foreign ownership innovate more and create more value from innovation while firms with greater state and widely held ownership innovate less and create less value from innovation. Our results also show that greater professional management (as opposed to state and family) involvement leads to more innovation and value creation from innovation. We discuss implications of these findings for research, practice and policy alike.

2 - Firm Decentralization, Market Research and Product Proliferation

Vincent Mak, University of Cambridge, Cambridge Judge Business School, Trumpington Street, Cambridge, CB2 1AG, United Kingdom, v.mak@jbs.cam.ac.uk, Nektarios Oraiopoulos, Jochen Schlapp

Empirical evidence suggests that firms often launch new products with little market research, resulting in a proliferation of unprofitable products in the market. In the present study, we attempt to understand this phenomenon from the perspectives of firm decentralization. To begin with, we develop a model in which a firm considers bringing either or both of two new products to market. It is uncertain how the market would react to each product, but the firm's managers could decide to gather more information through costly market research before the bring-to-market decisions are made. We first analyze an integrated firm that decides centrally on its market research efforts. We then consider a decentralized case in which the products are developed by different managers whose market research efforts are not observable. Lastly, we consider the partially decentralized case in which the managers' research efforts and outcomes are observable but not contractible. In the decentralized cases, we focus on contracts that reward each manager by the performance of his own product (if it is launched) as well as the overall performance of whichever product(s) are launched. In general, we find that decentralization leads to less market research and higher proliferation of (unprofitable) products. However, when market research is sufficiently accurate while its cost is moderate, the decentralized firm incentivizes managers to carry out more research than the integrated firm. We also find that, in an integrated or partially decentralized firm, product proliferation may have a non-monotonic dependence on the cost of market research: when market research is sufficiently accurate, the number of products launched is least when research is moderately costly.

3 - Optimal Introduction Sequence for a New Component Technology across the Product Line

Ivan Guitart, PhD Student, IESE Business School, Av. Pearson 21, Barcelona, 08034, Spain, iguitart@iese.edu, Guilherme Liberali, Stefan Stremersch

When considering the launch of a new component technology, a manufacturer needs to decide in which product of an entire product line to insert this new technology. Some manufacturers first insert a new technology in their high-end products and then go down in the product line. Consider Tesla Motors that first introduced the electric engine technology in the Tesla Roadster, a $110k car at the high end of its range. Other manufacturers first introduce the new technology at the low end and then take it up market. For instance, Toyota first launched hybrid engine technology in the Prius and then introduced it in the Camry and the Highlander. What strategy is optimal is a hard problem to solve, because of tradeoffs between the expected margins and volumes for different models, and the level of technological quality available at different points in time. In this paper, we develop a mathematical program to solve to this problem. We explore the influence of different segment- and firm-specific variables on the optimal order of entry across segments. Subsequently, we show how to apply the model using a combination of experts' opinion, and consumer preferences estimated from a logit model that uses aggregated product-level data from the automotive industry. Finally, we compare the results of our model with the results of different heuristics used for introduction, concluding that our model performs better than the heuristics. Therefore, our model can lead to improvements on managerial decision making regarding the introduction timing of a new technology across segments.

4 - Building Value Creation Capabilities and its Impact on NPD Outcomes

Hyun Jung Lee, Ewha Womans University, 11-1 Daehyundong, Sudaemungu, Seoul, Korea, Republic of, hyunjunglee30@gmail.com, Jae H. Pae

Many practitioner and scholars recognize that the primary pursuit of business is to create and maintain value (Conner 1991). Firms that have failed to acquire appropriate knowledge and adapt to turbulent market environment to develop innovative new product to suit the rapidly changing position of its competitors and market necessarily lose their customers. According to resource based and knowledge based perspectives, the firms' ability to generate value is a function both of the resources and capabilities involved in value creation and of how the processes of value creation are organized and managed by participating individuals and organizations. Though understanding what value is and how value is created has attracted significant attention over the past decade (Anderson, Narus and van Rossum 2006) there is little consensus on what value creation is or on how it can be achieved (Lepak, Smith and Taylor 2007). Drawing from the knowledge based view, we propose and empirically test a conceptual model that examines how organizational factors (i.e. top management risk taking, marketing and R&D cooperation) influence knowledge acquisition, which results in value creation capabilities. Furthermore, this study tests the influence of value creation capabilities in new product development outcome reflected by creativity and NPD speed. Our empirical results reveal that product knowledge generally enhances two dimensions of value creation capabilities, new product development (NPD) and marketing capabilities. However, market knowledge does not necessarily improve NPD capabilities. This study contributes to the marketing strategy literature by exploring the relationships among market and product knowledge stock, a firm's value creation capabilities, and NPD outcomes.

Friday, 1:30pm - 3:00pm

■ FC01

01- Montreux

Social Networks and Social Influence I

Cluster: Internet and Interactive Marketing

Invited Session

Chair: Zsolt Katona, University of California - Berkeley, Berkeley, CA, United States of America, zskatonahaas@gmail.com

1 - Identification of Influentials in Virtual Social Networks: An Agent-Based Simulation

Henning Ahlf, University of Duisburg-Essen, Mercator School of Management, 65 Lotharstrasse, Duisburg, 47057, Germany, henning.ahlf@uni-due.de

Virtual social networking sites have become more and more popular over the last few years, attract millions of users worldwide and are growing exponentially (Katona, Sarvary, and Zubcsek 2011). The increasing amount of virtually connected consumers leads to a social-driven information exchange about products, brands or services. Within social networks, influentials can be considered as key users with high influence capabilities, unique communication patterns and important structural network positions (Weimann et al. 2007). For marketers an understanding of social influence is key to benefit from consumer-to-consumer interaction and to address potential new customers by utilizing these influentials. So far, virtual social network analysis neglects interpersonal factors of influence as well as an individual consumer decision making perspective. The analysis of individual interaction and the lack of empirical data from virtual social networks require a research method, which models individual consumer behaviors as a complex and adaptive system. Therefore, the author develops an agent-based simulation model to explore and investigate processes of social influence by combining perceived social activity, perceived structural positions and interpersonal relationship characteristics with an individual decision making perspective. Simulation results indicate that important members in virtual social networks are inadequately identified either through structural network or activity analysis respectively. The paper shows that agent-based simulation provides a deeper understanding of social influence processes in virtual social networks and serves marketers as a superior opportunity for identifying socially influential network members.

2 - Viral Marketing via Online Social Networks: Competing for Your Friends' Attention

Sarah Gelper, Rotterdam School of Management, Burgemeester Oudlaan 50, Rotterdam, 3062 PA, Netherlands, sgelper@rsm.nl, Ralf van der Lans, Gerrit van Bruggen

Marketing via online social networks is becoming increasingly popular. One of its attractive features is that members of social networks can play an active role in spreading information. In this paper we investigate the position of individuals in social networks, how this position affects communication behavior, and what this implies for seeding viral marketing campaigns. The theory of exchange networks serves as the framework for identifying network members that play an important role in the propagation of viral campaigns. It introduces the notion that relationships in social networks may be negatively connected. This means that messages from different senders compete for the attention of receivers of these messages. Using data on the propagation of a viral marketing campaign on an online social network with over four million network members, we find that influential network members are individuals with many contacts who themselves have only few other connections. For these contacts, there is little competition for attention and they are, therefore, more likely to respond. While influential network members obtain a higher reach if they decide to forward viral messages, they have a lower forwarding probability due to competition. These opposing effects lead to the need for trading-off the positive and negative features of influential network members when selecting effective seeds. We show that seeding strategies can be significantly improved by taking competition and the trade-off between the forwarding probability and influence into account.

3 - All Online Friends Are Not Created Equal: Discovering Influence Structure in Online Social Networks

Michael Zhang, Assistant Professor, HKUST, Dept. of ISOM, SBM, HKUST, Clear Water Bay, Kowloon, Hong Kong - PRC, zhang@ust.hk, Chong Wang, Xi Chen

Online social network generates an online mapping of socially connected individuals. These interlinked relationship networks enable new forms of marketing activities that take advantage of the embedded interpersonal influence. However, all online friends are not created equal. Despite possible similarity of positions in the network structure, two different friends of an individual may exert significantly different influence. In the context of an online social network, we examine the influence structure on top of the network structure. A Bayesian model with a reversible jump Markov Chain Monte Carlo procedure is proposed to estimate (1) individual susceptibility to social influence, (2) dyad-level tie strength within each relationship category, and (3) across-category complexity of social influence among online contacts. We implemented the proposed model on a data set collected from a social media site. Our results suggest that there is significant heterogeneity in individual-level social influence structure in terms of category complexity and susceptibility to social influence from different categories. We identify distinctively different patterns with respect to how activity intensity interacts with individual connectedness to determine influence structure across relationship categories. These results offer insights into why seemingly similar viral marketing efforts may have markedly different out-comes. The methodology can be useful for managers to improve the effectiveness of their targeted marketing plans.

4 - Social Media Marketing: How Much are Influentials Worth?

Zsolt Katona, University of California - Berkeley, Berkeley, CA, United States of America, zskatonahaas@gmail.com

This paper studies the competition between firms for social media influencers. Firms spend effort to convince influencers in a social network to recommend their product. The results show that the value of an influencer depends on the structure of the influence network. Influencers who exclusively cover a high number of consumers are more valuable to firms than those who mostly cover consumers also covered by other influencers. The total effort expended by firms is determined by the in-degree distribution of the network. Firm profits are highest when there are many consumers with a very low in-degree or with very high in-degree. Consumers with an intermediate level of in-degree contribute negatively to profits and high in-degree consumers increase profits when market competition is not intense. Prices are generally lower when consumers are covered by many influencers, however, firms are not always worse off with lower prices. The nature of consumer response to recommendations makes an important difference. When first impressions dominate, firm profits for dense networks are higher, but when recommendations have a cumulative influence profits are reduced as the network becomes dense. An extension models the incentives firms provide to influencers and how these affect influencers' network formation behavior. Direct monetary incentives lead to dense networks and consumers covered by many influencers. Such networks are only beneficial to firms when market competition is not intense. When the market is more competitive, firms are better off providing smaller direct incentives just enough to ensure a sparse coverage of consumers by influencers.

■ FC02

02- Lausanne

Modeling Multichannel Performance

Cluster: Internet and Interactive Marketing

Invited Session

Chair: Vibhanshu Abhishek, Assistant Professor, Carnegie Mellon University, Heinz College, Pittsburgh, PA, 15203, United States of America, vibs@cmu.edu

1 - A Model to Determine an Optimal Shipping Fee Policy

Christian Doppler, Doctoral Student, Goethe University, Frankfurt, Grüneburgplatz 1, Frankfurt, Germany, doppler@wiwi.uni-frankfurt.de, Bernd Skiera

Shipping fee policies involve the determination of shipping fees and free shipping conditions, i.e., cutoff levels above which customers no longer have to pay shipping fees. Its determination is fundamental for any online retailer as shipping fee policies strongly influence customer behavior and as shipping cost can eat up a substantial part of the profits of the retailer. This paper (i) presents a new model to determine the optimal shipping fee policy of an online retailer, (ii) develops and intensively tests an innovative method to calibrate all functions, (iii) uses the model in a real-world application, (iv) compares the results of different shipping fee policies, and (v) derives recommendations about optimal shipping fee policies in different situations. Our results show that shipping fees significantly influence the number of orders and the average order value. The experiments that we conducted in the real-world application also support the predictive validity of the results of our model. An extensive simulation also outlines that our newly developed calibration method works very well under many different circumstances.

2 - The Dynamic Resource Allocation for Multi-Channel Online Marketing

Michael Trusov, Assistant Professor of Marketing, University of Maryland, Smith School of Business, Van Munching Hall, College Park, MD, 20742, United States of America, mtrusov@rhsmith.umd.edu, HongshuangAlice Li, P. K. Kannan

Recent technology innovations enable many online firms to target and reach their potential customers through a variety of channels such as search engines, display banner ads, social media, and email. Firm-consumer interactions through these different touch points play a critical role in leading to site visits and ultimate conversions. However, when multiple online marketing channels weave together to acquire and convert customers, it becomes very difficult for firms to give specific credit to individual channels for such conversions. Therefore, it also becomes difficult for firms to understand and tease out the effectiveness of a single marketing channel in effecting trial and conversions. Without knowing the incremental return on investing in each channel, the day to day decision on marketing investment becomes complex and most times sub-optimal. In addition, costs are realized in a different way in the context of multi-channel online marketing than in the traditional marketing setting. Commonly, marketers measure the effectiveness of a single marketing channel using an aggregate measure, which is based solely on the last touch the customer has made before conversion. Many practitioners and researchers are aware of the shortcomings of this so-called last-touch model, and have proposed alternative methods to measure the incremental effectiveness of a marketing channel. In this paper, we propose a dynamic optimization model of resource allocation across multiple digital channels that accounts for user specific online behavior, channel contribution to future conversion probability as well as the cost associated with reaching the consumer through the given channel.

3 - Marketing Attribution in a Multichannel Customer Relationship Setting

Marcel Goic, Assistant Professor, University of Chile, Republica 701, Santiago, Chile, mgoic@dii.uchile.cl, Kirthi Kalyanam, Kinshuk Jerath

To contact customers, most marketing plans consider multiple channels ranging from traditional media advertising to new Internet marketing tools such as sponsored advertising in search engines. In this scenario, the problem of measuring the impact of each marketing effort on the customer base or marketing attribution is one of the key components in the design of successful campaigns and in the allocation of resources for each initiative. The main goal of this research is to explore how a multichannel contact with the customer affects his or her likelihood of making a purchase and how much attribution should be given to each touch point. We propose a parsimony model where the propensity to buy and use each channel is mediated by latent inventories of information which accumulate as the customer get in contact with the retailer. Using a dataset from an online retailer who tracks customers who visit his website and the marketing channel that originated the visit, we empirically investigate the impact in the purchase process. When analyzing the browsing and purchase behavior after a contact, we find significant difference across channels. In other words, the use of some channels is associated to larger probabilities of generating navigation patterns that will generate a sale. We also find that the browsing history has a different impact depending on the channel and that channels play different roles in the purchase process. While some of them attract customer to the website, others are used when customers are closer to make a purchase. Finally ignoring the contact history can generate biased estimated or even reverse the channel order in terms of their ability to generate value to the company.

4 - The Long Road to Online Conversion: A Model of Multi-Channel Attribution

Vibhanshu Abhishek, Assistant Professor, Carnegie Mellon University, Heinz College, Pittsburgh, PA, 15203, United States of America, vibs@cmu.edu, Peter Fader, Kartik Hosanagar

Consumers are exposed to advertisers across a number of channels. As a result, a conversion or a sale may be the result of a series of ads that were displayed to the consumer. This raises the key question of attribution: which ads get credit for a conversion and how much credit do each of these ads get? This is one of the most important issues facing the advertising industry. Although the issue is well documented, current solutions are often simplistic. Current practices apply simplistic methods like attributing the sale to the most recent ad exposure that penalize prior exposures and give undue credit to ad exposures further down in the conversion funnel. In this paper, we address the problem of attribution using a unique data-set from the online campaign of a car launch. We present a Hidden Markov Model of an individual consumer's behavior based on the concept of a conversion funnel that captures the consumer's deliberation process. We observe that different ad formats, e.g. display and search ads, affect the consumers differently and in different states of their decision process. Display ads usually have an early impact on the consumer, moving him from a state of dormancy to a state where he is aware of the product and it might enter his consideration set. However, when the consumer actively interacts with these ads (e.g. by clicking on them), his likelihood to convert considerably increases. Secondly, we present an attribution scheme based on the proposed model that assigns credit to an ad based on the incremental impact it has the consumer's probability to convert.

■ FC03

03- Bern

Strategic Consumer and Firm Decisions in Oligopolistic Markets: Session 3

Cluster: Special Sessions

Invited Session

Chair: Ahmed Khwaja, Yale University, New Haven, CT, United States of America, ahmed.khwaja@yale.edu

1 - Can Price Promotions Cement Store Loyalty? A Dynamic Structural Model of Spatial and Temporal Search

K. Sudhir, Yale University, 135 Prospect Street, P.O. Box 208200, New Haven, CT, United States of America, k.sudhir@yale.edu, Ahmed Khwaja, Navid Mojir

Price promotions are widespread in grocery retailing. Households seeking low prices can search across stores (spatial) and across time (temporal). Yet the existing literature on structural models of search has focused only on endogenously modeling either spatial or temporal search–but not both simultaneously. Focusing only on one of the dimensions can lead to bias in the estimation of search costs and misleading counterfactuals in evaluating the role of price promotions. This paper therefore develops the first dynamic structural model of temporal and spatial search model that nests a finite horizon model of spatial search across stores within an infinite horizon model of temporal search over time. We estimate the model using household purchasing behavior in the milk category allowing for discrete heterogeneity in search cost, travel cost and store loyalty and continuous heterogeneity in price sensitivity. We use the E-M algorithm in combination with mathematical programming with equilibrium constraint (MPEC) approach to estimate the model. A two segment model fits data best, where one segment of consumers with low search cost, travel cost and primary store loyalty, searches more spatially relative to a second segment with higher search cost, travel cost, and primary store loyalty. Within each segment, there is significant heterogeneity in price sensitivity, resulting in differential response to price promotions–moderating the level of temporal search. In combination, the search (and travel) cost and price heterogeneity allows us to characterize four types of search segments along the spatial and temporal dimensions: spatial, temporal, spatio-temporal and incidental search. Counterfactuals on changes in promotional frequency and depth demonstrate qualitatively different responses among the four search segments. In particular, in contrast to the conventional wisdom that price promotions reduce loyalty by inducing greater switching behavior, especially among price sensitive households, we find that search and travel costs moderate the impact of price promotions on store loyalty. For highly price sensitive households that have high search and travel costs, an increase in price promotions increases loyalty to their primary store, because households now have the option to get lower prices merely by temporal search at the primary store. Our results suggest that price promotions can be a loyalty enhancing device for stores.

2 - Dynamics of Option Value in Subscription Business Models: The Netflix Model under Operational and Technological Change

Vineet Kumar, Harvard University, Soldiers Field Road, Boston, MA, United States of America, vkumar@hbs.edu, Yacheng Sun

The Netflix business model is now used for a wide variety of products, including textbooks, art, toys and even planes. The essential idea behind the model is that of sharing, with the company owing the product, and lending it for use by consumers. Consumers often have a quota of products that they can "borrow" and must return a product to get a new one. We examine the uncertainty that consumers face in this model, and how they may choose to subscribe to a quota higher than their actual usage, in order to have the option value of using the product when necessary. We operationalize this model on data obtained from a Netflix-like DVD rental company, and conduct counterfactual simulations to understand the impact of operational changes (transfer time) and technological changes (instant availability of products), and determine how marketing instruments (product and price) ought to be optimally configured based on these changes, and determine how these changes impact the revenues of the company.

3 - Learning by Doing in the Solar Photovoltaic Industry

Bryan Bollinger, New York University, 44 West Fourth St., New York, NY, United States of America, bbolling@stern.nyu.edu, Kenneth Gillingham

The solar photovoltaic (PV) industry in the United States has been the recipient of substantial production subsidies at the federal and state level, often motivated by both environmental externalities and dynamic spillovers from learning-by-doing (LBD) in the diffusion of the technology. However, empirical evidence on the precise nature and magnitude of these LBD spillovers is nonexistent, despite billions of dollars of subsidies. Using a rich dataset on solar PV installations in California, we examine LBD spillovers in a model of solar PV supply, while allowing for economies of scale, market power, and the dynamics of pricing.

■ FC04

04- Monch

Channels: Retail Competition

Cluster: Special Sessions

Invited Session

Chair: Dinah Vernik, Assistant Professor, Rice University, Jones Graduate School of Business, Houston, TX, United States of America, vernik@rice.edu

1 - Positioning and Pricing of Horizontally Differentiated Products

Canan Ulu, University of Texas at Austin, 1 University Station, Austin, TX, United States of America, canan.ulu@mccombs.utexas.edu

We provide structural results and a solution method for designing horizontally differentiated product lines–optimizing product positions and prices–under fairly general consumer choice behavior. Our choice model is a generalization of the basic Hotelling-Lancaster locational choice model: Consumer tastes (ideal products) follow a general distribution; substitution disutility (transportation cost) can be an asymmetric convex function of product-spatial distance; and the market may not be fully covered. We formalize the notion that a shift of consumer tastes toward one end of the product space cannot result in a shift of the optimal product line in the opposite direction. For a unimodal taste distribution, we show that with respect to the product that covers the mode (or one of two products adjacent to it) prices and market shares drop toward the tails. Hence, higher popularity is always associated with higher price – although pricing, positioning, relative market share and popularity of products are all endogenous in our model. Our solution method is exact for discrete consumer taste distributions. Whereas, for continuous distributions, it requires lower and upper bounds, which can be computed efficiently using shortest path formulations and they asymptotically converge to the optimal profit.

2 - Assessing the Value and Consequences of Direct Store Delivery Channel Arrangements

Mumin Kurtulus, Vanderbilt University, Owen Graduate School of Management, Nashville, TN, 37203, United States of America, mumin.kurtulus@owen.vanderbilt.edu, Canan Savaskan-Ebert

Direct store delivery (DSD) is a channel arrangement where the retailer relies on a manufacturer for distributing and executing in-store operations for its own products. The growing popularity of the DSD practice in certain products categories over the recent years is a strong indicator that DSD has great potential. Despite the widespread adoption of DSD by numerous retailers and manufacturers, very little formal research has been conducted to understand the economic drivers behind this practice. Our research is a step in this direction and offers a model based analysis of the economic drivers and implications of DSD for both manufacturers and retailers.

3 - Bundling Strategies for Vertically Differentiated Products

Dorothee Honhon, Assistant Professor, Eindhoven University of Technology, Den Dolech, 2, Eindhoven, 5612, Netherlands, d.b.l.p.honhon@tue.nl, Amy Xiajun Pan

We study how a retailer chooses the profit-maximizing bundling strategy for vertically differentiated products, called components, under capacity constraints. We characterize conditions under which no bundling, pure bundling and mixed bundling strategies are optimal and provide efficient methods to calculate optimal prices. We also study when offering only the complete bundle or only components may lead to a substantial profit loss.

4 - Managing a New Product Introduction through Quick Response and Advance Selling

Dinah Vernik, Assistant Professor, Rice University, Jones Graduate School of Business, Houston, TX, United States of America, vernik@rice.edu, Fernando Bernstein, Preyas Desai

Innovations and new products are the growth engine for companies in most markets. In markets such as consumer automobiles, appliances, electronics, and computers, it is very difficult to predict consumers' tastes and preferences. As a result, even after significant marketing research, manufacturers and retailer face significant uncertainty about consumers' response to new products. While new product research in marketing and other allied areas have examined challenges for many marketing mix decisions, distribution channel related issues have not received as much attention. In this paper, we examine the impact of demand uncertainty for new products on distribution channel management. In particular, we study how two important strategies to deal with demand uncertainty affect manufacturers, retailers and the entire distribution channel. These two strategies are quick response and advance selling. Quick response is a production and distribution strategy designed to rapidly react to changing market conditions by adapting production quantities and delivery methods to meet the changing market needs. This model is currently adopted by many firms, including technology and fashion manufacturers (e.g. the Spanish apparel company Zara). In advance selling, a manufacturer may require a commitment on order quantities (advanced sale) by the retailer to manage the demand uncertainty.

FC05

05- Montblanc

The Global Channel

Contributed Session

Chair: Tayfun Aykac, ESCP Europe Business School Berlin, Heubnerweg 8-10, Berlin, 14059, Germany, taykac@escpeurope.eu

1 - Does Brand Loyalty Really Happen for Children's Market? A Comparative Study from Indonesia, Portugal, and Brazil

Jony Haryanto, Associate Professor, Satya Wacana Christian University, 52-60 Diponegoro Street, Salatiga, 50711, Indonesia, jonyharyanto@yahoo.com, Arnaldo Coelho, Luiz Moutinho

Children's market is very challenging and potential. In the very dynamic and ever changing face of the children's market, identifying and being able to optimize the factors that can preserve product dominance is key to product longevity. This paper attempts to identify factors which identified as the antecedents of brand loyalty in children's market. We did a semi structure interview in Indonesia, Portugal and Brazil to validate our model. We also did a survey within these three countries to test our hypotheses. The findings of a preliminary study, semi-structured interviews and past research suggest that brand personality, brand trust and brand salience are important antecedents to create emotional bonding in the children's market. Meanwhile, brand loyalty was identified as the consequence of emotional bonding, autobiographical memory and habituation. It is hoped that this study can contribute to the body of knowledge and understanding of the factors and their inter-relations that can contribute to the development of autobiographical memory and brand loyalty in the children's market.

2 - Validating SME's Supply Chain in China – Institution Perspective

Ming-Chih Tsai, National Chung Hsing University, Department of Marketing, 250 Kuo-Kuang Rd., Taichung, Taiwan - ROC, mctsai@nchu.edu.tw, Yu-Chi Lu

Chinese small- and medium-sized enterprises (SMEs) have contributed significantly to the national economy. However, SMEs do not appear to implement SCM and consequently receive fewer advantages. Notably product quality of Chinese manufacturers has not reached a satisfactory level. SMEs are generally regarded as easily influenced by external forces. The intensive supply chain manufacturers clustered in China have increased societal influences. However, to date research focused on institution dimensions and the role it plays in SCM has been limited. As China is rapidly turning itself from world factory to world market, knowing Chinese business behavior is important for global business. As a result, this study aims to assess and validate the coercive and mimetic influences of Chinese channel members for product quality performance. The manufacturers under Taiwan and Southern China institutions are chosen for comparison. Based largely on institution theory and supply chain references, six hypotheses are developed with measurements associated to construct a conceptual model. Valid data of 121 manufacturers is collected and reliability and validity examinations are carried out prior to path analysis. Result analysis indicates that the supply chain resource is not present in Chinese SME leading to the high failure rates. In terms of institution forces, the SMEs are significantly influenced by coercive power although China is more influenced by upstream suppliers whereas Taiwan is by downstream distributors. On the other hand, China perceives mimetic influence more heavily than Taiwan but the influence proves ineffective in improving product quality. Finally, the developing Chinese SME institutions are explored and discussed.

3 - Power Asymmetry in Intercultural Sales Negotiations

Tayfun Aykac, ESCP Europe Business School Berlin, Heubnerweg 8-10, Berlin, 14059, Germany, taykac@escpeurope.eu, Robert Wilken, Frank Jacob, Nathalie Prime

Negotiations in business-to-business markets between selling and buying companies increasingly cross national borders. Often, negotiating companies possess different power levels, which impedes value-claiming for low-power parties. Extant literature on power asymmetry does not consider attributes of negotiations between parties with different cultural backgrounds, a setting that theoretically predicts interesting results. Thus, this study uses an intercultural setting to examine power asymmetries. Unlike most studies, we manipulate power through team size and extend the investigation to culturally mixed teams. The empirical results show that the high-power party dominates the negotiation, which makes the low-power party adapt its strategies to the culture-bound strategies of its more powerful counterpart. However, low-power negotiators do not necessarily suffer from an inferior power position as the use of integrative strategies is positively linked to their individual profits. To further challenge our key proposition, we conducted an additional study with symmetric power dyads where only solo negotiators bargained with each other. In contrast to asymmetric power negotiations, these solo vs. solo settings are more characterized by the specific culture-bound negotiation styles of both bargainers. In other words, bargainers are not overruled by the culture-specific negotiation strategies of the opponent. They can rather rely on their own negotiation strategies for the achievement of high outcomes. Therefore, for intercultural sales negotiations, we advise potential low-power bargainers either to insist on negotiations with an equal size of attendants for both opposing parties or to focus on the use of integrative strategies.

FC06

06- Monterosa 1

Consumer Characteristics

Contributed Session

Chair: Mihaela Alina Nastasoiu, PhD Student, Western University, Canada, Ivey Business School, 291, Windermere Rd., London, ON, N6G2J9, Canada, alina.nastasoiu@gmail.com

1 - Materialism and Beauty Perceptions Amongst Young Female Pakistani Consumers

Farah Naz, Lecturer, Karachi University, Instiiute of Business Administration, Karachi, Pakistan, fbaig@iba.edu.pk, Jami Moiz

With the increased media exposure and the availability of numerous beauty brands the female consumers have changed the definition of the beauty ideals. Numerous researches have been conducted which determine the impact of media on the materialistic tendencies and the consumption patterns. The purpose of this research is to determine whether there is any relationship between materialism and the importance that the young female consumers attach to beauty and appearance. The research was conducted in two phases: first phase was qualitative and second phase was quantitative. The qualitative research was done through focus groups. The target respondents were females between ages 16-24, college going/ university going students. Thirteen focus groups were conducted both in Karachi and Lahore. The qualitative phase was followed by quantitative phase. Survey was done in the cities of Karachi, Lahore, Islamabad, Rawalpindi, Multan and Sukkar. It was a self administered survey. The survey sample size was 450 respondents. The research was analyzed with SPSS. Factorial Analysis, correlation, and regression techniques were used. Six segments were identified through factor analysis: traditionalists, Rationalists, switchers, pretentious, self-conscious and beauty conscious. The different segments identified indicated differences in brand loyalties, materialistic tendencies and motivation in the purchase of beauty products. The results have implications for the marketers in terms of product development, positioning and communication. The limitation of the study was that it was conducted in the urban cities of Pakistan. The rural areas might point to a different scenario.

2 - The Development and Validation of a Consumer Confidence Scale

Volkan Yeniaras, Kadir Has University, Kadir Has Caddesi, Cibali, Istanbul, Turkey, volkan.yeniaras@khas.edu.tr, Antonis Simintiras, George Balabanis

The paper deals with the operationalization of consumer confidence. Progress in the consumer confidence research is hampered by the existence of multitude of conceptualizations. The paper tries to consolidate the different approaches and offer a valid all-encompassing operationalization. Empirical work indicates that five-dimensions underlie the consumer confidence concept. The dimensions follow confidence in the main stage of the buying process, namely, the need recognition, information search, alternative evaluations, purchase decisions, and post-purchase outcomes. The study employs a novel methodology to ensure the content validation of the new operationalization of consumer confidence. This article, attempts to bridge the gap in the literature regarding the content validation, an issue that has been long overlooked in the marketing literature, via a data triangulation that is used during early stages of the scale development procedure which is based on a combination of focus groups, experimental procedures, individual interviews and expert reviews prior to collecting survey data to address previous limitations. Cross-validated evidence for the content validity of the revised conceptualization of consumer confidence is reported. Survey data obtained (n=415) from a development sample are used for measurement purification and preliminary validation. A cross-validation of scale in a new survey data set (n=311) obtained from real consumers indicates strong support for the dimensionality, reliability, convergent, discriminant and nomological validity of the revised consumer confidence constructs and the existence of minimal method bias. Finally the study provides information on the characteristics of the confident consumer segment.

3 - Variety Seeking and Complex Consumption Behavior – An Analysis of Path Data

Alberto Marcati, Professor, LUISS University, Viale Salvini 2, Roma, 00184, Italy, amarcati@luiss.it, Riccardo Massari, Pierpaolo D'Urso

Variety seeking, i.e. the biased behavioral response of an individual consumer switching brands, induced by the utility she derives from the change itself (McAlister and Pessemier 1982), is an important driver of consumption decisions and has been the object of a rich stream of research, dating back to the fifties and pointing to the fact that it is a multi-dimensional concept. The current widespread availability of path data, i.e. data that account for sequences of choices related to the purchase or post-purchase activity (Larson, Bradlow and Fader 2005; Kamakura 2012), opens up new and exciting opportunities and calls for an adaptation of traditional concepts and models. We are analyzing an original set of data, collected routinely by a service provider at a European ski resort, detailing the sequence of lifts that have been chosen by skiers in their daily activity, for a full week. By using the Damerau-Levenshtein distance (Damerau, 1964; Levenshtein, 1966) across paths, we perform a cluster analysis of paths and we compute the medoids, i.e. 'actual' paths of a small number of individuals, that are representative of a larger group of consumers (in our analysis, respectively 14 medoids and 330 individuals). We then consider those medoids and measure for each of them (Gijsbrecht, 2000; Handelsman, 1987; Trivedi, 1999; van Trijp and Steenkamp, 1996): breadth (number of unique lifts), width (number of lifts), variety index (number of shifts between lifts), entropy (balance in the distribution of lifts), centralization (connectedness of the path). Finally, we analyze the relationship among those measures and discuss the hypothesis that variety seeking is related to usage and that heavy users tend to be also variety seekers.

4 - Predicting Churn through Variety Seeking Behavior

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Consumers differ with respect to the variety they seek among the offerings of a service provider that charges a flat subscription fee (e.g., among the facilities of a recreation center or among the channels of a broadcasting company). We investigate the relationship between this variety-seeking propensity and the likelihood of churning out of the provider's customer pool. Results in consumer behavior experimental literature support the idea that variety-seeking is a good predictor of churn. For example, variety-seeking has been shown to act as a self-pacing mechanism that allows consumers to enjoy a given set of stimuli over long periods of time; so committed customers are more likely to be variety-seekers. Moreover, the finding that more varied sequences are better evaluated in retrospect, and the fact that they are perceived to offer better value for money–lend further support to the negative relation between variety-seeking and churn. We test this relationship on data from SiriusXM (a radio broadcasting company). First, we develop a new measure of variety-seeking among music channels. Furthermore, we show that this measure has good predictive power in several specifications of the survival model, even after allowing for consumer heterogeneity. We compare the results of several models: a Cox partial likelihood model, where the baseline hazard remains unspecified, as well as full likelihood models that impose an exponential or Weibull distribution on the baseline hazard. Our results show that variety-seeking measures are very useful in discriminating between customers at high or low risk of churning and can thus be an effective managerial tool.

■ FC07

07- Monterosa 2

Service Marketing

Contributed Session

Chair: Dubravko Radic, Professor, University of Leipzig, Grimmaische Strasse 12, Leipzig, 04109, Germany, radic@wifa.uni-leipzig.de

1 - Determinant Factors of Consumer Behavioral Intentions in Electronic Financial Service Encounters

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The purpose of this paper is to empirically examine the relationship among service encounter constructs in electronic financial services. Service encounter is a dyadic interactive process between service providers and consumers. Service encounter is considered as one of the most important managerial tasks for service providers because the degree of managerial capabilities of service encounter affects overall performances of service providers. Prior service studies have identified service quality, perceived values, satisfaction, and behavioral intentions as key constructs in service encounter study. Behavioral intentions are a set of actions consumers will take in the post service encounter phase. Widely accepted actions of behavioral intentions are 1) repetition of services, 2) recommendation of services to others, and 3) feedback on services to service providers. Repetition and recommendation are important because they are directly related to service providers' revenue increases. Feedback is also important because it will bring opportunities for service providers to rectify the current situations and operational structures. In order to examine the relationship among service encounter constructs, we have developed a model to be examined. The model is designed with a special focus of measuring direct and indirect influences from constructs of service quality, perceived value and satisfaction to the three actions of behavioral Intentions construct mentioned above. Using empirical data obtained from a web-based survey on electronic financial services, we will examine the model and discuss academic findings as well as practical implementations followed by a conclusion.

2 - Return on Service Amenities

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Firms often vie for competitive advantage by providing additional services (amenities) to their customers. In the hotel industry, for example, analysts use the term 'amenity creep' to describe the constant pressure for brands to differentiate by adding services such as fitness centers and high-speed Internet access to their offerings. We build a model of how service amenities produce financial return. The profits from service amenities arise from two sources: increasing initial choice and increasing revenues from repurchase. The repurchase effect can itself be split into incidence of future purchase (yes or no) and additional revenue conditional on repurchase. We apply the model in the context of hotel amenities, using a large-scale customer database provided by a major hotel chain, employing hierarchical Bayesian estimation to estimate the model. The estimation results are then used to evaluate return on investment for two service amenities, for each of several hotel brands. We find that return varies across amenities and that the return on a single amenity can vary substantially across different brands. These empirical results show that the pattern of return on amenities can be complex, and that each brand needs to carefully evaluate the profitability of each service amenity. We conclude that the model can serve as a useful decision tool for managers deciding which service amenities to provide to their customers.

3 - Service Productivity: Improving the Trade-off between External and Internal Efficiency

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The concept of productivity differs between services and manufacturing. This is mainly due to the inseparability between production and consumption which leads to the following trade-off: When input resources into the service process are reduced, cost-efficiency is raised, but at the same time perceived quality of the service decreases which leads to a negative revenue-efficiency. In this paper we will address this trade-off, which most service companies face, and demonstrate how this trade-off between cost-efficiency and revenue-efficiency can be improved by changing the framing of the customer-service provider interaction. In a natural field experiment, the default setting for the cleaning process in a hotel was altered and the amount of cleaning as a measure for cost related efficiency and customer satisfaction as a measure for revenue-efficiency observed. Results confirm that an altered default setting can improve service productivity in the customer-provider interaction since cost related efficiency significantly improves while the revenue related measure does not change significantly.

■ FC08

08- Edelweiss

Price Competition II

Contributed Session

Chair: O. Cem Ozturk, Assistant Professor of Marketing, Georgia Institute of Technology, 800 West Peachtree St. NW, Atlanta, GA, United States of America, Cem.Ozturk@scheller.gatech.edu

1 - Coordination of Price Promotions Within a Product Line

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In this paper, I investigate a question of how a firm producing multiple substitute products should coordinate its price promotions. I model price competition between two firms, each producing two products that are horizontally differentiated with respect to some characteristic. Consumers are divided into loyals, who purchase their preferred product, and switchers who have heterogeneous preferences for the four products. The preferences of the switchers are modeled using nested logit with the structure of the nests determined by whether the switchers substitute easier between different types of the products belonging to the same firm (brand-primary specification) or between different brands (type-primary specification). I find that for the brand-primary model, the firms rarely promote their products together while for the type-primary model, joint promotions are frequent.

2 - Effect of Reference Prices on Product Positioning and Pricing in Non-Durable Goods Markets

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While the existence of reference price effects in consumer decision making is extensively documented in prior research, few studies have focused on its implications for firms' strategic behavior. We fill this gap by examining how product positioning and pricing in a non-durable goods market is affected by two types of reference prices: (i) average prevailing price in the market and (ii) past purchase price. Customers gain additional utility if their purchase price is less than the reference price. Our analysis shows that: (a) firms opt for Hi-Lo pricing with higher prices in Period 1 and lower prices in Period 2, (b) competition is exacerbated between firms in both periods, leading to lower prices and profits, and, (c) product differentiation reduces. This happens because the marginal gain in market share from reducing prices is higher than the benchmark case where reference prices are not considered. This effect increases price competition in both periods. Further, higher prices in Period 1, which become the historical reference prices for Period 2, lead to higher customer utility in Period 2. Although this across period effect dampens price competition in Period 1, the pro-competitive effect is stronger than the anti-competitive effect, resulting in observations (a) and (b). Further, one may expect firms to reduce price competition by increasing product differentiation. Contrary to this expectation, we find that firms get locked in a prisoners' dilemma situation and move their product positions closer, thereby intensifying competition. Finally, we examine two alternate specifications of the reference price effect and find that if consumers use only past purchase price as their reference, it is possible for firms to make higher profits in Period 1, but not overall.

3 - Pricing Optimal Contingent Products in Marketing Channels

Sihem Taboubi, Associate Professor, HEC Montreal, 3000 Chemin Côte Sainte Catherine, Montreal, QC, Canada, sihem.taboubi@hec.ca, Georges Zaccour, Peter Kort

This paper studies the pricing strategies of firms belonging to a vertical channel structure where optional contingent products are sold. Optional contingent products are characterized by unilateral demand interdependencies. That is, the base product can be used independently of a contingent product. On the other hand, the contingent product's purchase is conditional on the possession of the base product. We aim to examine the optimality of loss-leader pricing in a context where the interdependent products are controlled by different firms located at two levels of the distribution channel and to investigate the impact of competition at the contingent product's market. The problem is modeled as a game played between a manufacturer and a (two) retailer(s). The manufacturer controls the transfer price while one of the retailer(s) control(s) the base product's retail price. Under both the monopoly case and the competitive case, the retailer(s) control(s) the contingent product's retail price and the manufacturer is considered as the channel leader.

4 - The Impact of Local Market Exits on Rival Pricing

O. Cem Ozturk, Assistant Professor of Marketing, Georgia Institute of Technology, 800 West Peachtree St. NW, Atlanta, GA, United States of America, Cem.Ozturk@scheller.gatech.edu, Sriram Venkataraman, Pradeep K. Chintagunta

During economic turmoils, companies usually reconsider their retail network structure in order to find ways to cut costs, reduce intra-brand competition, and respond to demand contraction. Local market exit is an option that companies in many industries such as motion picture, airline, retail gasoline, hospitality, and discount retailing often exercise to achieve these goals. Therefore, it is crucial for managers and policy makers to understand the impact of local market exits on product market competition, particularly on prices. The purpose of this paper is to measure the impact of local market exits on the pricing behavior of rivals in the context of the U.S. automobile industry. Using a unique and extensive auto dealer panel data set including monthly observations at the dealer/vehicle level, we provide some empirical evidence on the spatial heterogeneity of price effects of local market exits. We then investigate a variety of mechanisms that could explain this heterogeneity.

■ FC09

09- Mimosa

Advertising Planning, Budgeting and Ad Effectiveness

Contributed Session

Chair: Peren Ozturan, PhD Candidate, Koc University, GSB Rumelifeneri Yolu, Sariyer, Istanbul, 34450, Turkey, pozturan@ku.edu.tr

1 - Decomposing Advertising Budgets

Ceren Kolsarici, Assistant Professor, Queen's University, 143 Union Street, Kingston, ON, K7L3N6, Canada, ckolsarici@business.queensu.ca, Demetrios Vakratsas, Prasad Naik

Budgeting is one of the most complex decisions in marketing. Despite research agreeing on constant spending as the optimal advertising policy, this rarely happens in reality. Pulsing or flighting schedules are quite common for many brands suggesting a sub-optimal behavior on marketers' side. Are managers acting irrationally or can we argue for "rational overspending?" Our paper is motivated by precisely this question. We argue that one of the many challenges facing managers in the budgeting process is the uncertainty of marketing effectiveness. To overcome this uncertainty, managers experiment by deviating from the baseline spending. It is only through this perturbation that they can measure and discern effectiveness. The greater the uncertainty, the greater the perturbation will be. Based on relevant literature we decompose the advertising budget into four benchmark components: a) baseline spending, b) experimentation, c) competitive spending and d) percentage of sale. We investigate the contribution of each of component to the budgeting decision and discuss the proportion of managerial overspending through the use of adaptive dual control theory. We empirically derive the advertising response function and discuss the implications on the optimal advertising policy. The empirical application suggests that advertising budgets are predominantly benchmarked by the percentage of sales (65%) method, while the role of baseline spending (5%), experimentation (3%) and competitive sales heuristic (2%) is quite negligible. Roughly 25% of the budget is overspending. The advertising response follows a piecewise linear function, suggesting a bang-bang type optimal polity. The findings provide insights into the managerial decision-making process which are discussed.

2 - Carryover Effects of Communication Activities: A Meta-Analysis

Soenke Albers, Professor of Marketing and Innovation, Kuehne Logistics University, Brooktorkai 20, Hamburg, 20457, Germany, soenke.albers@the-klu.org, Christine Koehler, Vamsi Kanuri, Murali Mantrala

Over 30 years have passed since Clarke (1976) derived first generalizations about the size of advertising carryover effects, almost 20 years since the re-analysis of his dataset by Leone (1995). In this time span empirical evidence on carryover effects has substantially grown. Ignoring the longterm impact of communication instruments may lead to suboptimal allocation decisions with severe profit consequences. However, recent meta-analysis primarily concentrated on the estimated shortterm elasticities. With our current analysis we try to fill this research gap. Our dataset includes 1,075 observations of estimated carryover effects from eight different carryover models found in 109 econometric studies conducted in the time period from 1962 to 2012. Furthermore we coded 45 independent variables to capture possible determinants of carryover size. The resulting mean advertising carryover of 0.57 is very close to the value of 0.59 reported by Clarke (1976). For personal selling activities we receive a slightly higher mean value of 0.65. To get further generalizable insights how the carryover varies with respect to covariates such as region, product maturity, and time we provide results of the estimation of a hierarchical linear model.

3 - Timing of Advertising Pulses

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In many industries, brands systematically switch advertising on and off (Dubé et al. 2005), a phenomenon often referred to as pulsing. The optimality of such pulsing strategies has been the focus of a large stream of normative research. While some studies claim that even-spending strategies are preferable (e.g., Sasieni 1989), more recent work confirmed the optimality of pulsing (e.g., Naik et al. 1998; Dubé et al. 2005; Freimer and Horsky 2012). It has been argued that, in general, the brands may benefit by timing / scheduling these pulses in-phase with their main competitors (Park and Hahn 1994; Freimer and Horsky 2012). In this study, we investigate the timing of advertising actions for close to 750 CPG brands in over 120 product categories over a four-year period. We first identify the direct competitors for each brand and then empirically model the advertising decisions of these competing brands. We expect brands, in general, to time their advertising actions in-phase with those of their main competitors (Freimer and Horsky 2012). However, out-of-phase timing behavior is expected for brands that differ in a) advertising intensity, b) advertising effectiveness, c) retention rate, and d) brand power (Park and Hahn 1994; Freimer and Horsky 2012).

4 - The Blind Leading the Blind? How Brands Follow Similar Brands in Advertising across Business Cycles

Peren Ozturan, PhD Candidate, Koc University, GSB Rumelifeneri Yolu, Sariyer, Istanbul, 34450, Turkey, pozturan@ku.edu.tr, Aysegul Ozsomer Tunali, Koen Pauwels

While descriptive research finds firms decrease their advertising spending during economic downturns, prescriptive research indicates increasing it is beneficial for firm performance. This paper aims to tackle this paradox by bringing in the role of social influence among marketing managers and examine imitation behavior between direct competitors as a potential explanation for procyclical advertising spending. Building on strategic groups literature, the research proposes and shows that similarity with respect to market share, price levels, and consumer mind share leads firms to behave in a similar way when they decide on advertising spending. We conduct a time series analysis over a dataset that covers six consumer packaged goods categories through 2001 and 2010 from Spain and find that imitation is less influential through downward business cycles.

■ FC10

10- EMBA 1

Sales Force Integration

Contributed Session

Chair: Thomas Steenburgh, John L. Colley Associate Professor, University of Virginia - Darden, 100 Darden Boulevard, Charlottesville, VA, 22903, United States of America, steenburght@darden.virginia.edu

1 - Aligning Marketing Campaigns and Sales Force

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Most marketing campaigns for products that require "sales assistance" are conducted with the purpose of generating sales leads that can be followed up and closed by sales force. However, such an arrangement of marketing-sales interface leads to the moral hazard in team problem for the firm. The current industry best practice to deal with the issue is to use lead qualification mechanisms. We study coordination mechanisms that can help firms achieve higher levels of coordination and efficiency. Our results indicate that there exists a gap between the efficient solution and the coordination achieved by use of lead qualification technologies. We find that a contract involving a tournament for marketing agents with an endogenous prize and a bonus plan for individual sales employees achieves efficiency when uncertainty is below a threshold. We extend the model to consider competition between firms and find that though in the equilibrium firms always want to coordinate their sales and marketing teams, the equilibrium represents a Prisoner's Dilemma when service competition is high compared to price competition.

2 - IMC Strategies Involving Agency Relationships

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In many industries, managers use on both advertising and personal selling to sell products (e.g. prescription drugs). One key characteristic of these instruments, when used together, is that they are often synergistic. To formulate optimal integrated marketing strategies in such contexts, we propose a dynamic principal agent model to understand the strategic implications of these synergistic effects on promotional budgets. We characterize the optimal strategies (e.g. effort and advertising) in closed-form and derive novel allocation rules for integrated marketing commutation strategies involving agency relationships.

3 - Cross Selling in the Banking Industry, the Value of Recommendations among Branch Sales Managers

Guillermo Armelini, Professor, ESE Business School, Av. Plaza 1905, San Carlos de Apoquindo, Santiago, RM, Chile, garmelini.ese@uandes.cl, Sebastian Maldonado, Erica Salvaj

Cross selling entails selling products in the firm's product line that the customer does not currently own. Previous studies have developed models, based on past customer behavior, to understand what products should the firm cross sell to which customers at which time. However, as recent researches showed two problems arise with the indiscriminate use of cross selling models based on past information. First certain, customers with persistent adverse behavioral traits (e.g., limited spending) might exhibit a downward spiral of unprofitable relationship the more the firm cross-sell them. Second, customer behavior might change over time and the drivers of such changes might not be properly stored in a database. Encouraging sales managers to cross sell their customers through recommendations (referral) to other business units might be a way to overcome the aforementioned problem. Real life cases showed that following this strategy firms can significantly improve their net profits. In this paper we study conditions under which customer cross selling can be improved through recommendations of sales managers across business units. We use a rich data set that combines the number of recommendations and successful outcomes among 252 sales managers who belong to 8 different business units of a financial group. Our results indicate that cross-selling is more effective among business units with a natural sequence of consumption (e.g banking first and investment then), that incentives are useful to increase cross selling rate across business units with not natural sequence (e.g. banking first and travel service then), that the number of recommendations do not increase the likelihood of cross-selling and that the sales managers' traits do not affect the cross-selling success rate.

4 - Pricing for Sales Leads

Jan Pelser, Maastricht University, Tongersestraat 53, Maastricht, Netherlands, j.pelser@maastrichtuniversity.nl, Dhruv Grewal, David Cox, Ko de Ruyter, Martin Wetzels

Identification and management of sales leads is an important area of interest for marketers. Successfully initiating business with new customers requires identification of the right prospects and tightly managing the sales process. In recent years, companies have chosen a number of different approaches to lead management. To ensure lead quality, some firms evaluate prospects centrally and assign pre-validated leads to sellers in the appropriate markets. However, recent evidence shows that in such a system, sellers may perform worse in following up on assigned than on self-generated leads. As a potential remedy, a system is proposed in which salespeople effectively purchase pre-validated leads. Such a system has the potential to optimize lead allocation and ultimately increase sales to new customers. Important questions however are: Would salespeople pay for leads? And, how do they evaluate lead attractiveness? In cooperation with a Fortune 500 computer technology manufacturer and service provider, we survey a large sample of reseller salespeople with a conjoint questionnaire. We examine how sellers evaluate different leads and use Latent Class Analysis to uncover heterogeneity in the response to lead attributes. Specifically, we find evidence that different segments exist who evaluate leads differently. We show that lead pre-validation has a strong effect on lead attractiveness for certain segments, while others seem to be less convinced that centrally-validated leads are superior. Similarly, we find large variations in price sensitivity between segments. Finally, we show that seller characteristics, such as risk aversion, have an important impact on lead evaluations. Based on our findings, we derive implications for lead generation and allocation programs.

5- Implementing Corporate Entrepreneurship: The Marketing-Sales Interface During a New Product Launch

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Business-to-business firms communicate with customers primarily by way of the sales force. In turn, the successful implementation of corporate entrepreneurship is largely dependent upon the actions of sales managers and salespeople in business-to-business markets. We examine the effects that marketing managers' influence tactics have on sales force compliance with longitudinal data that span five months after the launch of an innovative new product in a Fortune 500 company. This dataset allows us to study the consequences of influence tactics in a temporal manner, a design feature of our study that makes a significant contribution to the literature. Complying with another's influence during a new product launch is inherently temporal in nature; yet empirical tests to date have relied on cross-sectional analysis. Results indicate that whereas indirect influence (i.e., inspiration and consultation) takes time to manifest itself in the sales force, direct influence (i.e., pressure) has immediate, albeit short-lived, returns. Further, the findings suggest that marketers should consider sales managers' launch commitment before determining which influence tactics to employ with salespeople and that consultative influence does not influence salesperson compliance.

■ FC11

11- EMBA 2

Bayesian Methods

Contributed Session

Chair: Sam Hui, New York University, 40 West 4th Street, Tisch 910, New York, NY, 07310, United States of America, khui@stern.nyu.edu

1 - Ingredients and Consumables: Inferring Consumption from Purchase

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Prior research has applied direct utility models to explain the purchases of multiple goods in multiple quantities. In the context of cross-category purchases, researchers have modeled the interactions between categories through correlated error terms and correlated preference parameters. While these approaches can accommodate various patterns of substitution and complementarity, they lack an economic intuition for why such a correlation should exist. We propose a direct utility model that captures product complementarity in a new way. In our framework, two complementary goods are two parts of a composite good from which a utility is derived. Consumers buy ingredients that they combine to make consumables, and then enjoy the utility from the consumables. While the quantities of consumables are usually unobservable, we take a Bayesian approach to uncover them from the quantities of ingredients purchased. We apply our model to estimate the consumers' preferences for consumables. This novel approach sheds light on individual consumption patterns and on the interactions that exist between complementary categories.

2 - Modeling Music Preferences

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Music is becoming ubiquitous. Many people start every day waking up to their favorite song, listen to music on their way to work and at work, and have music in the background at restaurants, cafés, gyms and stores. However, music is not well understood by both academics and practitioners in marketing. When defining music, it is necessary to consider the concept of music: music is made up of the elements of melody, rhythm, instrumentation, tempo, mode, pitch, harmony and meter. While a few studies in marketing have music as their focus, none of them have considered music from a comprehensive and quantitative perspective. In addition, music-related studies in marketing are mainly done in the context of advertising. The focus of this research is on developing a better understanding of music preferences. Our research approach involves the use of a conjoint experiment to decompose the preference of each musical element and a hierarchical Bayes model to measure individual heterogeneity for the preference. The results suggest the need for developing a modeling framework that informs music choice decisions in marketing by formally incorporating individual preference toward each musical element.

3 - Bayesian Multidimensional Scaling Incorporating Dimension Reparameterization with Variable Selection

Duncan Fong, Professor of Marketing, Pennsylvania State University, 456 Business Building, Department of Marketing, University Park, PA, 16802, United States of America, i2v@psu.edu

To analyze data collected from surveys where subjects are asked to rate multiple stimuli, multidimensional scaling (MDS) is commonly used to produce a joint space map of subjects and stimuli in a reduced dimensionality in order to gain insights into the inter-relationship among these row and column entities. In this paper, we propose a new Bayesian vector MDS procedure incorporating dimension reparameterization with a variable selection option to determine the dimensionality and simultaneously identify the significant covariates that explain the stimulus positions in the joint space map. We discuss how we solve identifiability problems that are typically associated with a vector MDS model and demonstrate through a simulation example that our proposed model outperforms a benchmark model. An empirical application dealing with consumers' ratings of large sport utility vehicles is presented to illustrate the proposed methodology. We are able to obtain interpretable and managerially meaningful results from our proposed model with variable selection while demonstrating that the performance of the benchmark model is comparatively unsatisfactory.

4 - Analyzing Moment-to-Moment Data using a Bayesian Functional Linear Model: Application to TV Show Pilot Testing

Sam Hui, New York University, 40 West 4th Street, Tisch 910, New York, NY, 07310, United States of America, khui@stern.nyu.edu, Tom Meyvis, Henry Assael

To understand how consumers respond to continuous hedonic experiences (ranging from viewing a TV show to a painful medical procedure), researchers often collect continuous consumer feedback ('moment-to-moment' (MTM) data) in addition to consumers' evaluation of the overall experience. By analyzing how these MTM judgments are integrated into overall evaluations, researchers can determine how the structure of an experience influences consumers' post-experience satisfaction. However, this analysis is challenging because of the functional nature of MTM data. As such, previous research has typically been limited to identifying the influence of heuristics, such as relying on average intensity, peak, and ending. We develop a Bayesian functional linear model to study how the different 'moments' in the MTM data contribute to the overall judgment. Based on an integral equation, our approach incorporates a weighted average of MTM data as well as the role of specific 'patterns' (e.g., peak, trough) in driving overall judgment, thus nesting previous approaches such as the 'peak-end' rule as special cases. We apply our methodology to analyze data on TV show pilots collected by CBS. We find that our method provides better holdout predictive performance compared to the heuristics-based methods. Further, our results suggest that (i) the last quintile of a TV show is weighted around four times as much as each of the first four quintiles, and (ii) patterns such as 'peak' and 'trough' do not play substantial roles in driving overall evaluations for TV shows. We discuss the managerial implications of our results and other potential applications of our general methodology.

■ FC12

12- Geneve

Online Customer Response

Contributed Session

Chair: Mark Elsner, University of Cologne, Albertus Magnus Platz, Cologne, Germany, elsner@wiso.uni-koeln.de

1 - Online Smile Cues: A Double-Edged Sword of OCSR on Online Customer Consequences

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Among the myths taken as fact by frontline employees is the belief that smiling to their customers would always increase sales, but it seems not true when online customer service representatives (OCSR) smile to online shoppers (though cannot really 'smile' online, OCSR usually apply emoticons, such as ^-^, and onomatopoeia, such as 'haha,' as online smile cues). The research finds that online smile cues would help when OCSR conduct extra-role behaviors, but harm when they do in-role behaviors. The research is composed of three empirical studies. The first provides evidence for role behavior theory that extra role behavior leads to better customer consequences than in role behavior. The second experiment shows that online smile cues would help extra role behavior to get even better results, while smiles would make in role behavior less favorably by online shoppers. In the last study, we conduct a survey to verify our hypotheses among the mediator customer-employee rapport and its relationships with other customer consequences, such as customer satisfaction, referral intention and customer loyalty intention.

2 - Text Mining of Online Reviews: A Methodology for Analyzing Sentence-Based Customer Opinions

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Word of mouth has long been recognized to be an influential variable in marketing. With the growth of Internet applications, traditional word of mouth has evolved into the online form in a variety of web-based outlets where individuals spread their perceptions via the written word. These expressions are often in the form of online reviews or assessments of products and services. Traditional marketing research involves analysis of numerical information such as those derived from rating scale responses. To analyze sentence-based reviews, an entirely different class of modeling approach needs to be utilized. In this paper we attempt to extract the essence of the information present in consumer reviews by using a sentiment analysis type approach. Specifically we develop text-mining models that can make predictions of the overall evaluations of online reviews. Data was collected from a well known website using a WebCrawler type technique. The target is a binary variable and techniques of text mining including dimension reduction, feature selection and others are utilized. Several major machine-learning algorithms are applied for the analysis of customer comments. The overall results compare favorably with those from standard numeric based quantitative prediction methods. In addition, the text mining methodology helps us identify the key features that are related to positive overall evaluations of online users. Identification of key features will be of considerable help to marketers in designing their keyword choices for more effective application of search engine marketing strategies.

3 - Text Mining: Moving from Content Analysis to Predictive Modeling

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Text mining is a term that is fast becoming commonplace in the marketing research industry (e.g., Miner et al. 2012; Zanasi 2005). As the text analytics technology evolves, a firm's ability to efficiently analyze unstructured text information is increasingly being viewed as an effective way of gaining a competitive advantage. To date the most common form of text mining in marketing research is content analysis, i.e., using the frequencies of keywords to determine importance, structure and hence meanings or themes from all the unstructured text content about products, services, competitors, and/or customers. This paper explores various text mining methods and software applications (e.g., those provided by SAS, SPSS, R, NVivo, Leximancer, and so on) by examining a case study for a major airline interested in building its brand equity. We compare qualitative and quantitative research methods, to those obtained via mining and modeling verbatim text data. We demonstrate that text mining provides advantages in cost, time, resources, and scalability, when compared to more traditional methods such as structured qualitative and quantitative research. We argue that unstructured and free-form text has the potential to possess the richness of qualitative research output and the predictive capability of quantitative research method. We show that text mining also produces key client specific drivers, in addition to insights on how to implement those drivers. This is accomplished by exploring different text mining software applications to find a solution to convert text data into a tetrachoric correlation matrix and run multivariate data analyses such as factor analysis and reliability analysis.

4 - The Importance of the Source in Personalized Online Banner Advertising

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In retargeting, online banners are tailored to individual consumers according to their recent shopping behavior. Although this increasingly employed method might make banners more relevant to consumers, they may also perceive it as overly manipulative or privacy intruding. In this study, we show that consumers' previous trust in a banner's source (its advertising company and display website) eliminates this prevailing "targeting trade-off." In particular, when a company is well-trusted, it can increase its banners' perceived informativeness through high personalization without triggering consumers' negative emotions. In contrast, when the company is lowly trusted, highly personalized banners are not perceived more informative, but instead elicit anger. These outcomes are moreover amplified by consumers' previous trust in the display website on which a banner appears. If both source components are previously not well-trusted, a highly personalized ad erodes trust in them even further. Together, these effects finally explain consumers' behavioral responses to highly personalized banners: while well-trusted companies achieve significant increases in click-through, view-through, and purchase probabilities, lowly trusted firms suffer the direct opposite.

5- When Does Online Content Matter? The Role of Source and Message Characteristics

Mark Elsner, University of Cologne, Albertus Magnus Platz, Cologne, Germany, elsner@wiso.uni-koeln.de, Maik Eisenbeiss, Werner Reinartz

Online media are a combination of user-generated content and traditional journalism. Both types have considerable impact on firms, brands, and products in a variety of ways (e.g., brand perception, product reviews, sales). Therefore, marketers are interested in understanding the processes that i) lead to a dissemination and visibility of certain topics and ii) affect company relevant success measures. We investigate factors related to the message (e.g., sentiment) as well as the source (e.g., degree of interactivity or reach) to model the impact of online media content on different success variables. We account for the fact that different online media platforms (e.g., blogs, news site, boards) differ fundamentally in the way information is generated, provided, and disseminated. The findings of this project will help managers and researchers gain a better understanding of the interrelated effects of different types of online discussions that emerge from different platforms.

■ FC13

13- Luzern

Finance and Marketing III: Innovation

Contributed Session

Chair: Paul Valentin Ngobo, Universite Orleans France, Rue de Blois, Orleans, 45000, France, paul-valentin.ngobo@univ-orleans.fr

1 - Attenuation of News Value: An Empirical Study with Best Companies Lists

Chayoun Kim, Northwestern University, Kellogg School of Management, 2001 Sheridan Rd, Evanston, IL, 60208, United States of America, chayoun-kim@kellogg.northwestern.edu

This paper analyzes the stock market reactions and news value of Best Companies lists. We use event-study method to measure the stock market reactions to the Fortune's 100 Best Companies to Work For and Best Companies for Minorities, BusinessWeek's Best Global Brands, Forbes' America's Best Big Companies, Business Ethics' 100 Best Corporate Citizens, and Universum's 100 Top MBA

Employers lists. By studying the stock market reactions, we can learn how traders, as consumers, take the news and react, where we infer the news value by the reactions of the traders. Our research focuses on how much of a news value, if any, the Best Companies Lists have, how traders react to this news, and how the news value of the list evolves over the years. We find that the news yields significant abnormal returns to the companies in the lists except for Fortune's Best Companies for Minorities, but the significant abnormal returns are mostly concentrated in the first 2 or 3 years and then the news value of the Best Companies Lists diminishes. We call this phenomenon as 'Attenuation of News Value.'

2 - Going Public: How Stock Market Participation Changes Firm Innovation Behavior

Simone Wies, Maastricht University, Tongersestraat 53, Maastricht, Netherlands, s.wies@maastrichtuniversity.nl, Christine Moorman

Innovation is a marketing action of high strategic relevance and a potential source of competitive advantage. Yet the high costs as well as distant and uncertain payoffs temper these benefits, turning innovation into a major challenge for most firms. This applies in particular to publicly listed firms that are exposed to unique stock market incentives. While public firms enjoy improved access to financial capital, they are constrained in their strategic choices as they have to deliver on short-term stock market expectations. This tension translates into opposing impacts on firm innovation activity that we explore in this paper. We do so by examining new product introductions of CPG firms that go public during the sample period from 1980 until 2011. This quasi-experimental set-up is complemented by a control group of 158 firms that remain private throughout the sample period. We find that the net effect of stock market listing is an increase in the number of new product introductions that comes at the expense of a shift toward more incremental innovation and away from breakthrough product introductions. Instead, public firms offer more marginal variety with each introduction (i.e., different flavors, package sizes, etc.) and reduce new product introductions into product categories that are new-to-the-firm. We contribute to literature by showing a role of the stock market and the process of going public in affecting firm behavior. Finally, by using a quasi-experimental approach, we are able to rule out methodological concerns with regard to unobserved omitted factors.

3 - Explaining Cross-Country Differences in the Effects of R&D Expenditures on Risk and Stock Returns

Paul Valentin Ngobo, Universite Orleans France, Rue de Blois, Orleans, 45000, France, paul-valentin.ngobo@univ-orleans.fr, Hubert Gatignon

The role of R&D spending has been assessed in a number of fields including marketing, economics, finance and strategic management. Although the focus varies across fields, extent research has made significant contributions in particular on the effects of R&D spending on firm performance. However, this research has been dominated by single-country studies. Furthermore the empirical evidence has been limited to major developed economies: USA, UK, Canada, and Australia. Therefore, the differences in country environments in which investors value the company's R&D expenditures have not been examined. There is even limited comparative research focusing on differences across these developed economies (e.g., comparing the USA versus Japan or Europe). In our research, we examine the extent to which investors' response to R&D expenditures differs across a broad range of countries. We test hypotheses about the role played by institutional factors in explaining cross-country differences in investors' response to R&D expenditures. Our analysis is based on data from more than 5,000 companies in 25 countries over 14 years. A hierarchical linear model with latent variables is estimated simultaneously on this global database. Our analysis reveals that the effects of R&D on stock returns, systematic risk, and idiosyncratic risk vary significantly across countries. In particular we establish that the way a country protects investors' interests, the innovativeness of the country and its religious affiliations explain the extent to which R&D expenditures influence stock returns, systematic risk and idiosyncratic risk. We discuss the implications of these results for a firm's global value creation through innovation strategies.

■ FC14

14- Zurich

Innovation in Emerging Markets

Contributed Session

Chair: Mohammed Alnuwairan, PhD Student, Manchester Business School, 232 The Edge Clwoes Street, Salford, Un, M35NF, United Kingdom, mohammed.alnuwairan@postgrad.mbs.ac.uk

1 - Help or Hindrance? How Global Innovation Clusters Hurt and Stimulate Each Other

Nukhet Harmancioglu, Assistant Professor, Koc University, College of Administrative Sciences, and Economics, Sariyer, Istanbul, Turkey, nharmancioglu@ku.edu.tr, Koen Pauwels, Gerald J. Tellis

Silicon Valley has been a highly productive cluster. Governments worldwide have tried to emulate its success by fostering 'silicon' clusters of their own. Prior research has not addressed (1) how these clusters compare in terms of innovation productivity; and (2) whether and how global innovation clusters compete with versus stimulate each other. This study seeks to address these issues. The authors study the inter-cluster dynamics of four clusters in emerging markets, Bangalore, Beijing, Taipei, and Tel Aviv against those in three developed markets, Silicon Valley, Tokyo, and Cambridge.The authors analyze the dynamics of inter-cluster productivity with a vector auto-regressive (VAR) model of three innovation metrics (patents, startups, and new product commercializations) at a monthly level over a 10 year period (1999 - 2008), accounting for private equity, IPO and venture capital investment in each cluster, and GDP, interest rate and the PhD talent pool in each country. Findings indicate that Silicon Valley has an enduring regional advantage despite the growth of other global clusters. Contrary to conventional wisdom, emerging clusters feed rather than hurt developed clusters, while developed clusters hurt the productivity of emerging clusters. Emerging clusters are often mutually competitive. The authors discuss the implications of these findings.

2 - Technological Leapfrogging in Emerging Markets

Gerald J. Tellis, Professor of Marketing, University of Southern California, Marshall School of Business, Los Angeles, CA, United States of America, tellis@usc.edu, Deepa Chandrasekaran

New technologies have the potential to improve consumer welfare, increase consumer productivity, and facilitate revolutionary services. Are emerging markets catching-up in adopting new technologies over time or even leapfrogging developed markets? What technologies are particularly susceptible to catch-up or leapfrogging? What factors drive catch-up and leapfrogging in emerging markets? To address these questions, the authors analyze market penetration of 13 old-new technology-pairs across 117 developed and emerging countries of the world.The authors find that catch-up and leapfrogging are widespread. They vary dramatically across categories: very low for work products, high for fun products, and very high for touch products. Emerging markets catch-up at nearly 2/3rd the penetration levels of developed markets. Time-to-catch up is reducing over calendar time for both touch and fun products in developed markets and for touch products in emerging markets. Catch-up and leapfrogging are primarily driven by the low relative price of the new technology and the low penetration of the prior technology. Surprisingly, national wealth is not a significant driver of catch-up or leapfrogging. Thus, relative price trumps national wealth as a driver of the hazard of these two events. Catch-up and leapfrogging are particularly important for touch products, because the latter serve as new technological platforms for revolutionary services in banking, education, information dissemination, and distribution of government subsidies and incentives. The authors discuss the implications of the findings.

3 - The Hesitant Hai Gui Return-Migration Preferences of U.S.-Educated Chinese Scientists and Engineers

Robert Zeithammer, University of California-Los Angeles, Anderson School of Management, Los Angeles, CA, United States of America, robert.zeithammer@anderson.ucla.edu

Managers, research administrators, and policy makers need a greater understanding of the factors that drive return migration decisions of foreign STEM (science, technology, engineering, and mathematics) doctoral graduates of U.S. universities. To address this need, we report the results of a large multi-school conjoint survey of return migration preferences among U.S. STEM PhD students from China. The survey presents the respondents with potential job offers and yields individual-level estimates of each respondent's indirect utility of a job as a function of location, job status, and salary. The estimated preferences imply that Chinese doctoral graduates currently tend to remain in the United States because of a large salary disparity between the two countries rather than because of an inherent preference for locating in the United States. Given the estimated preferences, we conduct several policy-relevant counter-factual simulations of return migration. We document demographic heterogeneity in job preferences that policy makers can exploit to counteract the potential reverse brain drain.

4 - Reverse Logistics: The General Environment Analysis of Emerging Economy Country

Mohammed Alnuwairan, PhD Student, Manchester Business School, 232 The Edge Clwoes Street, Salford, Un, M35NF, United Kingdom, mohammed.alnuwairan@postgrad.mbs.ac.uk, Munirah Almousa, Stephen Eldridge

Reverse logistics is a process by which a manufacturing entity systematically retrieves previously shipped products or parts from the point of consumption, manufacturing, distribution or use for possible recycling, remanufacturing, disposition or disposal (Dowlatshahi, 2005). This paper explores the current state of reverse logistics in different industries of the Kingdom of Saudi Arabia (KSA). In particular the general environment of political, economic, social, environment, technology and legislation were analysed in order to identify the factors that derive or hinder reverse logistics application in KSA. Further, the current reverse logistics practices in KSA are evaluated against the practices in developed countries, which have been reported in the literature, in order to identify opportunities for industries to improve their reverse logistics operations. The approach used is a case study analysis of five organizations from different industries, which were drawn from the plastics, oil, and steel processing industries. Secondary data collection, direct observation, and semi- structure interviews methods were used in the case studies to facilitate comparisons with existing literature on reverse logistics. The findings suggest that implementation of reverse logistics in KSA is in the early stage. Reverse logistics appear to be predominantly driven by economic factors and are highly dependent upon the capabilities of third-party logistics service providers. A general environment of reverse logistics framework is developed from the literature and evaluated for implementation in KSA. In conclusion, managerial implications and future research directions are presented.

Friday, 3:30pm - 5:00pm

■ FD01

01- Montreux

Social Networks and Social Influence II

Cluster: Internet and Interactive Marketing

Invited Session

Chair: Srinath Gopalakrishna, Professor of Marketing, University of Missouri, 434 Cornell Hall, Trulaske College of Business, Columbia, MO, 65211, United States of America, srinath@missouri.edu

1 - Co-Evolution of Purchase Behaviors and Networks

Sang-Uk Jung, Assistant Professor, University of Auckland, office404, OGG Building, 12 Grafton Road, Auckland, New Zealand, su.jung@auckland.ac.nz

As online social networks continue to grow, it is becoming more crucial for marketing researchers to model and understand the social interactions among customers. Although distinguishing social influence from homophily is essential to understand the intercorrelated behaviors among customers, there are few studies to date considering homophily and influence simultaneously. The primary goal of this study is to simultaneously examine homophily and influence processes related to consumer purchase decisions in an online social network. Using a stochastic actor-based model, we construct a methodology to capture the joint interdependent dynamics of networks and behavior. We apply the model to a five-year longitudinal sample at a unique user-level dataset from a popular online gaming company in Korea. The data contain information about the relational ties between gamers, items or products purchased by each individual and individual gamer demographics. We find that co-evolution patterns of network and purchasing behaviors are different, depending upon the attributes of products. Implications of the model for targeted marketing policies are discussed.

2 - Detecting Influential Consumers in the Twitter Network on Competing Products

Makoto Mizuno, Associate Professor, Meiji University, School of Commerce, 1-1 Kanda-Surugadai, Tokyo, 101-8301, Japan, makmizuno@gmail.com, Makoto Abe, Naoki Shinbo

Targeting a few influential people, termed influencers or influential, at the early stage of WOM campaign has been considered as an efficient strategy to cause a large size of information cascade (e.g., Katz and Lazarsfeld 1955). This expectation may also hold by marketers in the age of social media (Twitter, Facebook, etc.). However, the results of existing empirical studies on this issue are not consistent: one study found a significant influence of 'hubs' having a large number of links in a social network service (Goldenberg et al. 2009) and another found the instability of seemingly influential users in Twitter networks (Bakshy et al. 2011). The latter study suggests that even if a WOM contagion starts from a few people with many followers, it is too costly to detect and activate these people. To contribute this debate, we introduce a microscopic approach to measure more precisely "influence" among consumers networked via social media. The data is collected from Twitter logs, selecting tweets (posts) on competing smartphones, iPhone and Android, and identifying the network based on a "who follows whom" relationship. We apply a disaggregate stochastic model familiar in marketing science in order to describe individual information-contagious behaviors and to test whether or not influence exists among networked consumers. This study is expected to offer an answer for the debate around influencers in social media from a new perspective. To elicit practical implications, we need to conduct a multi-agent simulation to explore the possible effective strategies for leveraging WOM contagion in social media. Finally, we discuss the limitation and further development of this research.

3 - Health Marketing with a Focus on Social Networks

Di Fang, Arizona State University, 1500 E Broadway Rd., Tempe, AZ, 85281, United States of America, dfang3@asu.edu

Health and marketing are not only relevant, they also raise important questions. The consumer faces a high level of uncertainty and imperfect information in a context in which wrong decisions have an important impact on their well-being. Researchers have proposed many different methods for developing long-term forecasts of product adoptions in a population. Due to recent progress in the applied mathematical research, innovation adoption processes in the population can be represented using network theoretic models in which customers in the target population are represented as nodes, and the potential contacts between them are represented as links (or edges) connecting the nodes. This is especially important in health industry because consumers rely on recommendations of friends and family more often due to the uncertainty and risk they face in choosing new products. In this paper, we extend the basic Bass model to include some simple characteristics of the topology of social networks through which a new product is adopted. Our network-based Bass models enable us to answer such a question: 'whether influence spreads by a process where a few close friends have relatively strong influence on adoption, or whether a large number of distant influencers, each with relatively weak influence?' In this study, we will learn about characteristics of the targeted population, namely consumers of health products and innovations, such as their income, gender, age, etc. More importantly, we will study how interpersonal connections influence one's adoption of a new product- that whether new product forecasting is more tied to characteristics of the social networks such as clustering and small path length or to product analogs for pre-launch forecasting.

4 - Linking Social Network Structures to Sales Prospecting Outcomes

Srinath Gopalakrishna, Professor of Marketing, University of Missouri, 434 Cornell Hall, Trulaske College of Business, Columbia, MO, 65211, United States of America, srinath@missouri.edu, Andrew Crecelius

The term "sales funnel" characterizes the progression of a typical sale in a well-defined sequence of steps. The first activity, and probably the most important in the sales process, is prospecting. Managers often complain that salespeople fail to prioritize their time properly to this activity (Johnston and Marshall 2011), especially noting the underinvestment in effort to consistently generate sales leads. From the salesperson's perspective, prospecting is very frustrating as it is difficult to see immediate gains from the effort deployed. Advances in communications technology might be alleviating these problems as social and professional contacts have become extremely important information sources that salespeople rely on to identify relevant prospects. In this paper, the authors conduct an empirical study of the social network structure of several hundred agents belonging to an insurance company in the United States. The network may be viewed as a mechanism that provides valuable referrals to the agents and helps them reduce the extent of cold-calling. Our research proceeds in three steps – we first draw on theories in sociology proposed by Granovetter (1973) and Burt (1992) to assess and describe various types of networks. Next, we link observable agent characteristics to the type of network structure observed to assess the model's predictive validity. Finally, we link an agent's social network structure to outcomes, in this case, the number of sales leads (quotes) generated and the conversion rate of those quotes. We discuss managerial implications of our findings to assist managers and salespeople to better manage the sales prospecting activity.

■ FD02

02- Lausanne

Multichannel Marketing

Cluster: Internet and Interactive Marketing

Invited Session

Chair: Els Breugelmans, KU Leuven, Korte Nieuwstraat 13, Antwerp, 2000, Belgium, els.breugelmans@kuleuven.be

1 - Are Offline and Online Channels Either Substitutes or Complements? The Evidence from Beauty Products

Jee Yeon Kim, Yonsei University, 332 Daewoo hall, 50 Yonsei-ro, Seodaemun-gu, Seoul, Korea, Republic of, k.ashley@yonsei.ac.kr, Jeonghye Choi

We challenge the symmetric relationship of sales performance between offline and online channels. We propose a conceptual framework for the multi-channel performance of experience products. That is, the online channel substitutes for the offline channel, however, the offline channel serves as a complement for the online channel. We further propose that the extent of substitution and complementarity depends on the purchase convenience and showrooming convenience, respectively. To test the proposed theory, we obtain sales data from a multichannel retailer of the major cosmetic brand in Korea. Unlike books, CDs, diapers, etc., the evaluation of beauty products are based on actual consumption experience. Our empirical findings support the asymmetric effects of cross-channel sales performance. The (cumulative) online experience hurts offline sales, while the (cumulative) offline experience helps online sales, and this cross-channel effect varies according to the extent of purchase convenience or showrooming convenience. We conclude with a discussion of implications for multichannel research and practice.

2 - How Bad is Online Shopping Cart Abandonment? An Investigation across Multiple Shopping Sessions

Stanislav Stakhovych, Assistant Professor of Marketing, Monash University, P.O. Box 197, Caulfield East, VI, 3145, Australia, stanislav.stakhovych@monash.edu, Jie Zhang, Michel Wedel, Yuanping Ying

Shopping cart abandonment is the bane of many online retailers. Industry estimates for shopping cart abandonment rates are very high in general. Other than the apparent reasons such as poor site design, high shipping charges, comparison shopping, etc., online retailers know little about the underlying reasons of shopping cart abandonment, let alone what to do with the abandoned shopping carts. While this issue has drawn attention among marketing academics recently, previous research on the topic has mainly focused on studying the outcome at the end of a single shopping session. In this study, we investigate consumers' online purchase behavior across multiple shopping sessions with an emphasis on the shopping cart abandonment phenomenon as well as purchase quantity decisions. Utilizing click-stream data provided by an online grocery retailer, we study consumers' shopping cart, order, and purchase quantity decisions across multiple shopping sessions by developing a joint model of these decisions within and across shopping sessions. We estimate the model in a Bayesian framework. Our study shows that there is a strong interdependence across multiple sessions and indicates that customers frequently break a shopping trip into multiple shopping sessions. In addition, their shopping cart and order decisions are influenced by marketing mix offerings, which implies that marketers can encourage consumers to transform an "abandoned" shopping cart into an order in the next shopping session.

3 - The Effects of Varying Channel Experiences and Direct Marketing on Customer Retention

Chun-Wei Chang, Assistant Professor, Governors State University, 1 University Parkway, University Park, IL, 60484, United States of America, cchang@govst.edu

Customer retention and churn have received increasing research attention in the field of customer relationship management in recent years. Researchers want to make more accurate predictions of customer lifetime value (CLV), which requires accurate estimates of retention rate, and knowing how and when a customer terminates his relationship with a firm instead of assuming that he stays with the firm for life. Such research is harder for firms in non-contractual service settings because the termination of relationships is difficult to observe, and thus retention rates used to calculate CLV are not easily evaluated. This paper provides a framework to estimate a relationship dynamics in a non-contractual setting whose customers' dropout time is not clearly stated and easily observed. I incorporate the effects of channel experiences and marketing communications on relationship dynamics, and use a nested structure to detect purchase preference and channel evolution simultaneously until 'death' of a relationship, and identify a more (in)active-oriented channel. The proposed nested multinomial HMM addresses changes in preference of purchase incidence and channel choice across time with respect to various relationship states, and deals with the impact of marketing communications and channel experiences on customer retention as governed by transitions between relationship states. The model extends prior studies of customer retention in non-contractual service settings by estimating retention probabilities, which are driven by various channel experiences and direct marketing, and incorporating channel evolution for active state customers.

4 - Cross-Channel Promotion Effects in Multi-Channel Grocery Retailing

Els Breugelmans, KU Leuven, Korte Nieuwstraat 13, Antwerp, 2000, Belgium, els.breugelmans@kuleuven.be, Katia Campo, Huying He

An important consideration for multi-channel retailers is which promotion strategy to adopt across channels. This not only requires insight into differences in promotion effectiveness across channels–which may provide opportunities for promotion differentiation–but also in potential negative cross-channel effects. This article examines cross-channel promotion effects in an online-offline multi-channel grocery context, and focuses on immediate cross-channel promotion effects on category purchase decisions, as well as delayed cross-channel effects on consumers' promotion sensitivity. When promotions in one channel have an immediate negative effect on purchase decisions in the other channel, the resulting cross-channel shifts in category sales should be taken into account for the analysis and planning of multi-channel promotion actions. Moreover, when a high promotion frequency in one channel leads to promotion anticipation and reduced promotion sensitivity in the other channel, offering different promotions in the online and offline channel may reinforce the risk of long-term erosion in promotion effectiveness. To analyze these immediate and delayed cross-channel promotion effects, we use an integrated modeling approach and estimate a Tobit II model that captures purchase incidence and spending decisions in the category, and that allows for channel-specific and time-varying promotion effects. The results show that category promotions in one channel have an important negative, immediate effect on category purchase decisions in the other channel, but that a high promotion frequency in one channel does not significantly reduce future promotion sensitivity in the other channel.

■ FD03

03- Bern

Emerging Market and Beyond

Cluster: Special Sessions

Invited Session

Chair: Kaifu Zhang, INSEAD, Fontainebleau, France, kaifu.zhang@insead.edu

Co-Chair: Yang Li, CKGSB, Beijing, China, yli14@gsb.columbia.edu

1 - Shadow Banking and Relational Contracts in Emerging Markets

Jian Ni, Johns Hopkins University, Baltimore, MD, United States of America, jni@jhu.edu, Qiaowei Shen

The private financial service market in the emerging economy is often characterized with the informal lending, high interest rate and turbulent transactions, especially for the small-to-medium enterprises. Based on the relational contract framework, we build a stylized contractual creditor-lender-borrower model while taking into account the impact of exogenous economic shock. We then test the model implication using a proprietary data set of Chinese underground loan market. We show as the lending relationship advances, the contractual terms become more favorable to the borrower, even though contractual enforcement is difficult in the emerging market and the borrower could have the moral hazard problem. Interestingly, the tension between incentive provision and contractual enforcement helps alleviate the moral hazard concern. However, exogenous credit supply shock favors longer-tenure borrowers, but might induce higher default (moral hazard). The study provides important implications on how to manage customer relationship in the service industries of the emerging market using relational/formal contract.

2 - A Dynamic Game of Entry and Expansion in the Chinese Fast-Food Market: KFC vs. McDonald's

Qiaowei Shen, University of Pennsylvania, Philadelphia, PA, United States of America, qshen@wharton.upenn.edu, Aamir Rafique Hashmi, Ping Xiao

We study the relationship between market structure and the entry decision of retail chains in the context of entry and expansion of KFC and McDonald's into the Chinese fast-food market. In particular, we ask the question of how a chain's decisions about entry into a new market and expansion within an existing market are affected by the size and the proximity of its own and its rival's network of outlets. We specify and estimate a dynamic game of entry and expansion which allows for multiple effects of network, including economies of density and cannibalization effect within one's own chain and the positive spillovers on demand and cost side as well as the competition effect from the rival chain. We estimate the size of different within- and between- chain network effects and perform counterfactual analysis to further evaluate the importance of these effects on chains' expansion strategy.

3 - Brands and Stereotypes

Kaifu Zhang, INSEAD, Fontainebleau, France, kaifu.zhang@insead.edu

Products from certain developing countries are often associated with a cheap-but-low-quality image. Lacking knowledge about specific brands, consumers sometimes apply such a broad-brush "stereotype" to both high and low quality brands from the same country. This paper studies the strategic aspects of this phenomenon. We discuss (1) high quality firms' incentives to promote their individual brands in order to 'break free' from the group stereotype, (2) the conditions under which the group image can be collectively improved, and, (3) the strategic options for a national brand promotion agency who is concerned about the overall country image and the firms' welfare.

■ FD04

04- Monch

ISMS Doctoral Dissertation Proposal Award Winners

Cluster: Special Sessions

Invited Session

Chair: K. Sudhir, Yale University, 135 Prospect Street, P.O. Box 208200, New Haven, CT, United States of America, k.sudhir@yale.edu

1 - Improving Survey Construct Accuracy through Uncertainty Inferred from Voice-Based Responses

Hye-jin Kim, Pennsylvania State University, University Park, PA, United States of America, hxk262@psu.edu, Huanhuan Shi, Min Ding

Marketing survey methods such as customer satisfaction surveys usually only consider the semantic aspect of responses, without accounting for uncertainty in such responses. To address this limitation, we propose the use of human voice as an alternative data collection format that allows uncertainty to be inferred based on pitch, intensity, and temporal features extracted from a respondent's voice. Built upon research in computer science, we designed and tested a method that uses a set of voice-based training questions to elicit different (un)certainty levels from subjects and use this information and the corresponding extracted voice features to train a machine learning algorithm (classifier). The classifier, which requires to be trained once using the voice data of a panel of respondents, is then applied to infer uncertainty in responses to a variety of survey contexts. Our empirical application is a customer survey for local restaurants in which satisfaction is measured from multiple items. For each item we treat the point estimate (i.e., the subject response) as the mean and the uncertainty as the variance to reweight the satisfaction construct using inverse variance weighting. The model incorporating the reweighted construct is shown to predict repeat purchase choices better than the benchmark model with the unmodified construct, thus providing evidence that incorporating uncertainty inferred from voice can indeed improve the accuracy of marketing insights from survey responses. We also demonstrate that the voice-based method is practical for marketers to implement.

2 - The Attribute-Based Multi-Armed Bandit for Adaptive Marketing Experiments

Eric M. Schwartz, University of Pennsylvania, Philadelphia, PA, United States of America, ericschw@wharton.upenn.edu, Eric Bradlow, Peter Fader

As business experiments become more popular, firms move beyond 'testing and learning' towards 'earning while learning.' Online advertisers, for instance, deliver dozens of different ad creatives across websites with the goal of acquiring customers. Over time, they adapt by allocating more impressions to better performing ads on each website. But how can they do this as profitably as possible? We frame this as solving the multi-armed bandit problem. This paper's contribution is to extend existing methods for bandit problems to handle various components of real-world adaptive marketing experiments (e.g., attributes of actions, unobserved differences in context, batched decisions). The key innovation is applying hierarchical models to randomized probability matching to solve the bandit problem with those components. The benefits of this new approach are demonstrated through a field experiment with a large retail bank using online advertising to acquire customers. The approach is compared to benchmark methods via simulation studies, providing insights into the types of the bandit problems in which certain types of methods to outperform others.

3 - Competition in Corruptible Markets

Shubhranshu Singh, University of California - Berkeley, Berkeley, CA, United States of America, shubhranshu_singh@haas.berkeley.edu, Ganesh Iyer

Emerging markets offer significant business opportunities. However, local and foreign firms selling in these markets are often faced with corrupt agents. This paper investigates the marketing strategy implications for firms competing for business in a corruptible market. I consider a setting in which a buyer (a firm or government) seeks to purchase a good through a corruptible agent. Supplier firms, that may or may not be a good fit, compete to be selected by the agent. Only the agent observes whether or not a firm is a good fit. Corruption arises due to incentive of the agent to select a non-deserving firm in exchange for bribes. Intuitively and as expected, a sufficiently large monitoring of the agent eradicates corruption. But the interesting point is that increasing the monitoring from an initial low level can backfire, making the agent more likely to select a non-deserving firm. As firms become reluctant to offer bribes in response to higher monitoring, it now becomes likely that the agent receives a bribe offer, in equilibrium, only from a non-deserving firm. This non-monotonic agent behavior makes it difficult for the buyer to reduce corruption. The implication is that the buyer should choose either to be ignorant or to take drastic measures to limit corruption. Further, I show that unilateral anti-corruption controls, such as the Foreign Corrupt Practices Act of 1977, on a U.S. firm seeking business in a corrupt foreign market can actually increase the profits of the U.S. firm. This is because such a control on the U.S. firm puts pressure on the buyer to set monitoring at higher levels and reduces corruption.

■ FD05

05- Montblanc

Channel Management

Contributed Session

Chair: Sujatha Chandrasekhar, Strategic Insights, 1875 I Street, Suite 500, Washington, DC, 20006, United States of America, suj@strategicinsights.com

1 - Managing Role Stress in Buyer-Supplier Relationships: Governance Mechanisms and Market Uncertainty

Maggie Chuoyan Dong, Assistant Professor, City University of Hong Kong, Tat Chee Ave., Kowloon, Hong Kong, Hong Kong - PRC, mcdong@cityu.edu.hk, Yulin Fang, Vivian Xu Zheng

According to role theory, both supplier and buyer have their own expectations of the privileges and obligations of the other party and itself in the exchange relationship. Deviation from or confusion of these expectations by either party inevitably leads to bilateral role stress, which is manifested by tensions and inefficiency of the relationship. Such role stress may be more pervasive in emerging markets with frequent changes. Clearly, a strategic approach to manage role stress is needed, yet prior research has rarely examined the mechanisms that can reduce role stress in buyer-supplier relationships. This study represents the first efforts in examining the role of different governance mechanisms, such as transaction-specific investments and relational norms, in reducing role stress between buyer and supplier. Furthermore, we compare which governance mechanism works better in reducing role stress under different market conditions. We empirically test the conceptual model through a survey of 141 buyer-supplier dyads in China. The results suggest that both transaction-specific investments and relational norms can reduce role ambiguity but not role conflict. Under uncertain market conditions, the reducing effect of relational norms is strengthened, but the effect of transaction-specific investments is weakened. Both types of role stress negatively affect buyer's as well as supplier's performance. These findings not only contribute to supply chain management research but also provide important implications for supply chain members in managing role stress in their relationships.

2 - The Valuation of B2B Relationship: Focus on the Impact of Relationship on Value Trade-Offs

Kyungok Yoo, Doctoral Student, Korea University, 145, Anam-ro, Seongbuk-gu, Seoul, Korea, Republic of, matsuko@korea.ac.kr, Jaewook Kim

The B2B relationship is considered as one of the important factors that has impact on marketing performance in lots of marketing researches. However, there are a few researches that find the impact of relationship on the performance evaluation process of the relationship when company makes decision related to B2B relationship because of bounded rationality made by the relationship itself. This is due to the belief that decision making process of companies might be rational unlike the decision making process of individuals. Even though the company customers are relatively more rational than individual consumers, companies' decision making are also made by human and based on perceptions. Therefore, if existence of relationship itself can make some influences on perceptions about the partner company and these perceptions can make the value construct (trade-off) of the relationship with the partner company, relationship might change the decision such as relationship continuity. In this research, because most judgments depend on utility or value, the relationship is considered to the factor that influence on judgments by valuation process. In certain relationship, benefits have bigger weight than sacrifices in trade-offs system or benefit is perceived bigger than physical benefits and sacrifices are perceived smaller than physical sacrifices. In other words, the authors try to demonstrate that the impact of relationship on trade-offs system in B2B relationship setting.

3 - The Impact of Sales Visits on Mere-Measurement Effects: Evidence from a B-2-B Setting

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It is typical for firms to survey customers to seek information on their purchase intentions, as well as information related to products they offer and about the sales persons with whom customers interact. Prior literature has established that just asking customers their behavioral intentions can change their subsequent behavior. This effect is commonly referred to as mere-measurement effect. Although mere measurement effect has been established as a robust phenomenon, extant studies have investigated the issue in business-to-consumer settings and do not examine the role of marketing efforts. The objective of this study is to systematically examine and quantify mere-measurement effects in a business-to-business setting, in which customers get to interact with sales representatives from various competing firms. Leveraging a unique behavioral data and repeated survey participation data, we examine the interaction effects between mere-measurement effects and visits by sales representatives on customers' likelihood to use the products. We propose and estimate a disaggregate-customer level model, in which competing firms act strategically in their allocation of sales representatives across customers. We estimate our model using MCMC methods. Our results indicate that the survey participation has a positive direct effect on consumer choice behavior even in a competitive setting. However, we also find that a negative interaction effect exists between survey participation and sales visits. Based on our results, we derive strategic implications for the design/execution of survey research and coordination between sales force activities and marketing research practice.

4 - Aligning Marketing and Sales for More Effective Channel Management

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In this research, the authors focus on how sales and marketing alignment helps distribution channel effectiveness in a cross section of Indian industries. The sectors examined are manufacturing, financial services, retail, and healthcare. The researchers have used the Kotler, Rackham and Chandrasekhar (HBR, 2006) and the Kotler, Walcott and Chandrasekhar (2009) framework to examine this relationship. Research objectives: 1) examine the relationship between the level of functional alignment between sales and marketing and distribution channel effectiveness; 2) examine how the undefined, defined, aligned and integrated levels of relationship impact effectiveness in B2B and B2C channel management; 3) understand specifically the sales-marketing alignment strategies used by practicing managers to align direct and indirect channel effectiveness. To explore this subject empirically, the authors examine the quality of the working relationship between sales and marketing in several companies spanning several industries. The data come from surveys of marketers, sales personnel and suppliers, via interviews and an online assessment questionnaire. In this paper we relate the perceived levels of contribution of sales and Mmrketing to distribution channel effectiveness. We also account for company size, geographic region and industry variability while addressing the following questions: What are the perceived contributions of marketing and sales alignment to channel effectiveness? What differences emerge in the impact of the relationship in B2B vs B2C companies? What steps can a company take to improve the working relationship between sales and marketing?

■ FD06

06- Monterosa 1

Consumer Decision Making

Contributed Session

Chair: Xianchi Dai, Professor, Chinese University of Hong Kong, Shatin, Hong Kong - PRC, xianchi@baf.msmail.cuhk.edu.hk

1 - Disaggregating Preference Stability into Core and Supplementary Product Attribute

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Whether preferences of product innovations are positively or negatively evaluated has been a long-standing debate in literature. Some researchers argue that product innovations (e.g. incrementally new products) are perceived as critical to product success. However, some insisted that innovative products (e.g. really new products) may cause lower evaluations and preference instability, leading to low adoption and hinders consumers from appreciating new benefits. To reconcile this debate, we suggest an alternative view of decomposing product preference into attribute preference. Specifically, we classify product attributes into core and supplementary categories and argue that innovations of supplementary attributes should be more favorably valued and their preferences should be more stable across time than evaluations and preferences of innovative core attributes. In other words, the nature of the innovative product attribute (i.e. core or supplementary) can affect preference stability at the product level. We further postulate that the mechanism underlying the observed preference instability due to core attribute innovation can be explained by the dual cognitive systems individuals use to process innovative information, the explicit COVIS (competition between verbal and implicit systems) system relying on working memory, and the implicit COVIS system operating on visual-spatial memory without relying on executive functioning of working memory. Preliminary results of our studies demonstrate our hypothesis. Findings from our studies are expected to influence product communication strategies by improving consumer evaluations and preference stability of new innovations, and are especially beneficial for managers launching innovations with changes of product functions.

2 - Influence of Temperature on Consumer Decision

Jungmin Jang, Doctoral Candidate, Korea University, 145, Anam-ro, Seongbuk-gu, Seoul, 136-701, Korea, Republic of, happy_min@korea.ac.kr, Song Oh Yoon

Current research examines the effect of environmental temperature on consumer decision-making. Specifically, we argue that consumers experiencing relatively hot (above 115?) temperature are likely to process information more thoroughly, resulting in less decision errors and greater information recall. Our arguments are based on the following two premises. First, because common English metaphors relate 'hot' with 'anger' or 'passion' as exemplified in the expressions, 'he has a hot temper' and 'he is burning up,' the concept of anger/ passion will be brought to people's mind while being exposed to hot temperature. Second, activation of anger/passion is shown to be associated with greater action tendencies(Frijda 1986; 2005) and heightened action tendencies in turn leads to greater information processing efforts(Lauren 2010). Two laboratory studies show findings consistent with our assumptions. In Study 1 participants induced to feel hot by holding a heating pad (vs. neutral pad) during decision-making used less heuristics, hence show lower computation errors in solving the bat and baseball problem (in Frederick 2005). Study 2 tests our hypothesis using two different cognitive measures: the type of choice people make and the post-choice recall. Participants in the hot temperature condition (vs. those in the control), tend to engage in greater trade-off analyses when choosing an option and exhibit better recall of attribute information following the choice. We believe that our results shed important light into the way in which a subtle change in ambient temperature affects consumer choice process and outcome.

3 - When Does Playing Hard-to-Get Increase Romantic Attraction?

Xianchi Dai, Professor, Chinese University of Hong Kong, Shatin, Hong Kong - PRC, xianchi@baf.msmail.cuhk.edu.hk, Ping Dong, Jayson Jia

Folk wisdom suggests that playing hard-to-get is an effective strategy in romantic attraction. However, prior research has yielded little support for this belief. This paper seeks to reconcile these contrasting views by investigating how two hitherto unconsidered factors, 1) psychological commitment, and 2) the asymmetry between wanting (motivational) and liking (affective) responses, can determine the efficacy of playing hard-to-get. We propose that when person A is not committed to pursuing further relations with person B, B playing hard-to-get will reduce both A's wanting and liking of B. However, when A is committed to pursuing B, B playing hard-to-get will increase A's wanting but reduce A's liking of B. Two studies confirm these propositions. In study 1, participants read descriptions of a meeting with a dating partner, who was described to be either someone they had crush on or someone randomly assigned to them, and was either cold or warm to them. Participants evaluated the partner along both affective and motivational measures. In study 2, participants interacted in a speed-dating session and then the male participants evaluated the female participant along affective and motivational evaluations. The female participant was a confederate trained to behave either warm or cold. Consistent with our prediction, in both studies participants rated the dating partner as more negative in terms of affective measures in the cold than in the warm condition, irrespective of the commitment level. However, motivational evaluations showed a different pattern. Being cold led to more negative motivational evaluation than being warm when the target of the strategy was not committed to building a relationship, but the reverse was true when the target had high commitment.

■ FD07

07- Monterosa 2

Customer Equity Through CRM

Contributed Session

Chair: Evsen Korkmaz, Erasmus University Rotterdam, Burgemeester Oudlaan 50, Rotterdam, 3062 PA, Netherlands, ekorkmaz@rsm.nl

1 - A New Look at Customer Relationship Management: Reducing Risks by CRM Strategy

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Academics and practitioners have claimed that customer relationship management (CRM) enhances a company's long-term performance by creating and managing customer value. However, a significant number of companies adopting CRM have cast strong doubts on CRM's ability of creating sustainable long-term performance. This doubt has been even growing under the current competitive marketing environments. There is an urgent call for researchers to develop a new insight into the role of CRM in today's turbulent business environments. The present research investigates a new role of CRM strategies in producing superior firm performance. First, we developed a game theory model between two competing firms to compare a CRM-oriented strategy (i.e., customer equity maximization) with a short-term profit-oriented strategy (i.e., short-term profit maximization). Second, we found out Nash equilibrium among the existing strategic pairs based on simulation. Third, we then applied the model to the dynamics of customer management data in the Korean telecommunications industry to empirically test our research hypotheses developed from the analytical model. The results show that a firm can benefit from a CRM-oriented strategy by reducing its risk rather than enhancing the firm performance. The present research discloses new advantages of CRM strategies in the current competitive environments.

2 - Customer Equity: What is the Impact of the Model Adopted in the Results?

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There is a recent debate about marketing accountability and marketers are facing the necessity of justify their investments. In particular, the accountability of intangible assets has been receiving great attention from academicians due to its measurement difficulties. Within these intangible assets, Customer Equity (CE) is a notable one and is important to any firm so that academicians and practitioners have been searching for a good measure to customer lifetime value and several different approaches have been proposed. Because these approaches usually differ in its variables 'the value of customer equity may vary from one approach to the other' (Kumar and George, 2007, p.162). Thus, it is important to explore these differences in order to understand each of one the approaches and to expand their use within financial managers and shareholders. Therefore, our paper aims to measure CE using five different theoretical models and check its sensitiveness to the independent variables. Using MATLAB, we made simulations to different values in these variables and checked its impact in CE. Furthermore, we made 3D simulations, which enable us to measure CE in various levels of retention rate and margin simultaneously. Our results suggest that: 1) in spite of the same data, the measured CE is different between the tested models; 2) in all models, the retention rate had an exponential relation with measured CE; 3) in our data, increasing the retention rate to about 80% or more, substantially increased the measured CE; and, 4) to maximize CE, managers should choice improve retention rate or margin regarding the model used. Besides, an implication is that academicians should include various CE measures as robustness tests in future papers.

3 - The Synergy Effect of Loyalty Program Integration on Customer Equity

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Many holding companies' new strategic direction in loyalty marketing is to integrate loyalty programs of their subsidiaries, which had been run individually, into a single program. We define this type of loyalty program as "family program." The purpose of this study is to investigate 1) whether a family program creates synergy effect by loyalty program integration in the perspective of customer equity and 2) which is the focal source of synergy effect among acquisition, retention, and cross-selling leading customer equity if it is successful to customer equity enhancement. To reach our objective, we firstly compare the level of customer equity before and after loyalty programs are integrated into a family program and then decompose customer equity of before and after merging loyalty programs into acquisition, retention, and cross-selling. The dataset for the empirical analysis is from a specific holding company in Korea. This company launched the family program in 2010 and eight subsidiaries joined this family program. We observed four firms which take 90% of total sales. Transaction records are from about 120,000 members who registered to the family program during three years between 2009 and 2011. Empirically, we can find that family program enhance customer equity and specifically, cross-selling is main driver of synergy effect.

4 - Market Segmentation in Buy-Till-You-Defect Models

Evsen Korkmaz, Erasmus University Rotterdam, Burgemeester Oudlaan 50, Rotterdam, 3062 PA, Netherlands, ekorkmaz@rsm.nl, Dennis Fok, Roelof Kuik

Buy-till-you-defect (BTYD) models provide predictions on metrics related to customers' transaction frequency, amount and timing, as well as customer lifetime, for companies operating under a non-contractual setting. These models mostly perform well, although at times they predict unreasonably long lifetimes for a substantial fraction of customers. Based on empirical analysis on different datasets, we argue that such long lifetime predictions can result from the existence of multiple segments in the customer base. In most cases there are at least two segments: one consisting of customers who purchase only a few times and the other of those who are frequent purchasers. To date the heterogeneity introduced through hierarchical modeling in the BTYD models is insufficient to account for such segments, thereby producing extreme predictions. We present an extension over the current BTYD models where we allow for segments within the customer base. More specifically, we consider a mixture of log-normals as the heterogeneity distribution, a variant of the hierarchical Bayes [HB] Pareto/NBD model. Our model increases the explanatory power of BTYD models as we are now able to evaluate the impact of customers' characteristics on the membership probabilities of different latent classes. The proposed model has been tested against the benchmark Pareto/NBD model (Schmittlein et al., 1987) and its HB extension (Abe, 2009) on a data set from a large grocery e-retailer in the Netherlands. We show that the accuracy of predictions on the population and on the individual level improve substantially by allowing for latent classes.

■ FD08

08- Edelweiss

Advances in Pricing

Contributed Session

Chair: Vinay Kanetkar, Chair, Associate Professor, University of Guelph, Dept. of Marketing and Consumer Studies, Guelph, ON, N1G 2W1, Canada, vkanetka@uoguelph.ca

1 - Decomposing Pass-Through in Regular Retail Price

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When commodity prices fluctuate, manufacturers respond by changing their wholesale costs which, in turn, forces retailers to consider whether and how much to adjust the regular price. While this is an extremely widespread phenomenon, there is little evidence on regular price pass through. We fill this void by making recourse to a highly unique and extremely comprehensive dataset: a census of all the wholesale price changes faced by a large US retailer covering sixty packaged goods categories over a four year period. To model regular price pass through, we build a multi-stage Bayesian hierarchical model that allows us to study both whether and in what direction a retailer changes the regular price in response to a wholesale price change as well as the magnitude of that change. Our flexible model accounts for category heterogeneity and asymmetric response to wholesale price decreases versus wholesale price increases. A key finding is that pass through is extremely asymmetric: when wholesale prices increase, the regular price is very likely to increase while, when wholesale prices decrease, the regular price is very sticky and typically does not change. More specifically, when the retailer decides to raise the regular price, a one percent increase in the wholesale price typically leads to a greater than one percent increase in the regular price. Our results are consistent with the menu cost model and a managerial desire to maintain a constant percent gross margin on products, (i.e., margin maintenance). Finally, the empirical analysis illustrates the importance of our multi-stage approach as a single stage model provides a poor fit to the data and yields misleading empirical inference.

2 - A Cloud Computing Pricing Model

Nazim Taskin, Assistant Professor/Lecturer, Massey University, Massey University Quad Building B, Albany, Auckland, 0745, New Zealand, n.taskin@massey.ac.nz, Tayfun Keskin

The major purpose of this study is to examine the cloud services pricing schemes and how they can improve previous pricing models by expanding the consumer set with time inconsistent behavior. The industry of cloud computing services is in its infancy, and firms employ pricing models based on conventional information goods. We offer a new approach to cloud services pricing considering the consumer discounting behavior. First, we propose a baseline model based on a profit maximizing monopolist serving to both rational and time inconsistent users. Our results reveal that the monopolist can profit from impatient users. In addition, we extend the baseline model with the effect of delayed network externalities because, by nature, information goods exhibit this property strongly. For the latter case, we show that the effect of network externalities reduces the impact of impatient hyperbolic discounters and the monopolist benefits less from time-inconsistent behavior. This study contributes to pricing theory and practitioners who make pricing decisions for cloud computing services.

3 - A Multi-Period Model of Scheduling the Product Line Sales Promotion

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This paper focuses on the scheduling the sales promotion in a multi-period manner for the monopolistic firms that carry more than one product. Those firms offer a product line with superior and inferior products targeting to high-end and low-end segments correspondingly. A sales promotion on the superior product in one period will attract a portion of low-end consumers away from buying inferior product depending on the strength of the promotion. We also consider sales promotion's carryover effect which means among those low-end consumers who bought the superior product in the last period, part of them still choose to buy the superior product at the full price in the next period. This can be explained by good experience or feedback in using the superior product. Eventually, those low-end consumers will revert back to the original state gradually if no new promotion launched. This is the benefit of the conducing sales promotion. But the harm of the promotion is the seller has to bear the opportunity profit loss from high-end consumers. In this study, by considering all the factors above, we build an analytical model to address the pricing and scheduling of the product line sales promotions in multiple periods.

4 - Are All Price Elasticity Estimates Biased? Role of Purchase Quantity in Price Elasticities

Vinay Kanetkar, Chair, Associate Professor, University of Guelph, Dept of Marketing and Consumer Studies, Guelph, ON, N1G 2W1, Canada, vkanetka@uoguelph.ca

There is a general agreement that price is important factor in sustaining revenue generation of any organization. When consumers purchase multiple units of the same good, researchers have a choice whether to use unit price or package price to understand demand for good and / or service. For example, if a package that can wash 40 laundry loads is priced at $8.80, researcher may use package price ($8.80) or unit price ($0.22) as an indicator of price. Tellis (1988) reported a meta-analysis study involving 24 studies which reported 367 price elasticity estimates. More recent meta-analysis by Bijmolt et al (2005) included 81 research studies with 1851 price elasticity estimates. Both studies concluded that on an average price elasticity is around -2. However, it is surprising that both studies do not include details about price itself. That is, there is no discussion whether price is measured as unit price or package price. To understand impact of missing variables on estimated of elasticities, several simulation experiments were conducted using a linear, log-linear, logistic and market share attraction models. For a linear model, monte carlo simulation indicated that when unit price and package size are not correlated, estimated parameters were biased but price elasticity was not biased. When unit price and package size were correlated (price discounting or premium), missing variables generally resulted in biased price elasticities. Similar finding were also found when models were non-linear. The research also used discrete choice experimental data where detergent choices were simulated. The estimated choice elasticities appear to be affected by missing package size and unit price. The magnitude of these biases is presented along with study details.

■ FD09

09- Mimosa

Store Brand Power

Contributed Session

Chair: Mark Vroegrijk, Post-doctoral Researcher, KU Leuven, Korte Nieuwstraat 33, Antwerp, 2000, Belgium, mark.vroegrijk@kuleuven.be

1 - The Power of Store Brands: An Integrated Framework on the Drivers of Store Loyalty

Rita Coelho do Vale, Assistant Professor, Católica Lisbon, Palma de Cime, Lisbon, Portugal, ritavale@ucp.pt, Pedro Verga Matos

Store brands, also known as private labels (PL), offer retailers the possibility of increasing and reinforcing customer loyalty. By introducing their own store brands, retailers are able to offer unique and exclusive products that customers cannot find in other retailers (Ailawadi, Pauwels & Steenkamp 2008), constituting also an opportunity for them to deliver a value-plus product that satisfies the customers' needs. However, instead of enhancing loyalty towards the retailing stores, PLs can be simply creating incentives for consumers to become more price sensitive, always searching for the cheapest products. Despite the accelerating growth of PLs, little research tried to offer an integrated approach to its role as driver of store loyalty. In this study we conducted an online survey that was answered by individuals that are responsible for their household purchases. A total of 560 participants completed the questionnaire. The survey followed an integrated approach to store loyalty drivers, including in one single framework several driven-factors for loyalty (in-store factors, economic factors, and PLs loyalty). This is an innovative approach since past studies tend to typically focus their analysis in one single factor, most of the times just analyzing in-store factors. Additionally, a retailers' classification was made based on the type of supermarkets participants indicated to purchase in regularly. This allowed an extensive analysis aiming to identify which driving-factors play a more significant role among the three different supermarket categories (low-price, medium cost and premium). Findings highlight the strong power of store brands, in particular the effect that these may have in terms of creating loyalty towards the stores.

2 - Risk Aversion and Preference for Store Price Format

Koichi Yonezawa, PhD Candidate, Arizona State University, 7231 E. Sonoran Arroyo Mall, Santan Hall, Mesa, AZ, 85212, United States of America, Koichi.Yonezawa@asu.edu, Timothy Richards

Consumers are uncertain about retail prices that vary from day to day and place to place. They typically purchase many products across many categories on a single purchase occasion, do not make a detailed purchase plan, and do not have complete price information before their trip. These shopping behaviors do not allow them to search for every price in their basket. How do consumers decide where to shop under uncertainty about their basket price? For this purpose, we examine pricing behaviors by retailers. Retailers design pricing strategies that can be characterized as a choice of store price format between offering everyday low prices (EDLP) and hi / low prices (HILO). EDLP and HILO strategies are characterized by the mean and the variance of price. EDLP stores set prices which are constant over time, while HILO stores set prices which are higher than EDLP stores on average, but use frequent sales featuring deep discount prices on a smaller set of products. We devise an experiment and econometric model that reveals how consumers' risk attitudes influence store choice. The experiment consists of two stages. In the first stage, we identify whether subjects are risk-averse or risk-taking and in the second stage, we test whether risk-averse subjects tend to choose EDLP stores and risk-taking subjects choose HILO stores. We find the pricing strategies allow risk-averse and risk-preferring consumers to self-select store format. Risk-averse consumers perceive that shopping at HILO stores is risky due to higher price variability and have an incentive to choose EDLP stores. On the other hand, risk-taking consumers prefer HILO stores because they have a positive probability of finding a product with lower price.

3 - Effect of Walmart on National Brands and Private Labels

Pranav Jindal, Assistant Professor of Marketing, Pennsylvania State University, 479 Business Building, University Park, PA, 16801, United States of America, pranav.jindal@psu.edu, Ting Zhu, Pradeep K. Chintagunta, Sanjay Dhar

The presence and entry of Walmart changes how consumers shop in different product categories. In this paper, we study the effect of Walmart on brand shares by comparing market shares for different brands at Walmart and other stores. Preliminary evidence shows that the presence of Walmart significantly affects the shares of national brands and private brands in different ways. Further, we study whether these differences can be attributed to (1) lower prices and/or assortment at Walmart (supply side), (2) segment of consumers reached by Walmart or (3) within consumer differences between shopping at Walmart and other stores. Teasing out these supply and demand side factors has important policy implications for manufacturers' distribution channel decisions.

4 - Vertical Positioning of Store Brands

Eunkyu Lee, Professor, Syracuse University, 721 University Avenue, Syracuse, NY, United States of America, elee06@syr.edu, Hwan Chung

Store brands have become a significant portion of retail business, outpacing the growth of national brands in the recent decade. The quality reputation of store brands has also steadily improved, and an increasing number of consumers now view some store brands as being comparable or even superior to leading national brands in quality. Consequently, not all store brands are low-quality low-price alternatives to national brands, and retailers must strategically select store brand quality levels relative to national brand quality positions to maximize category profits. However, the existing literature on store brand positioning mainly focuses on horizontal positioning, offering limited guidelines for vertical positioning. This study analyzes a retailer's store brand quality decision in vertically differentiated product categories with a game theoretic model composed of one or two national brand manufacturers and a retailer. We show that the nature of a retailer's store brand quality positioning is quite different from the manufacturer's national brand positioning decision guided by the strategic need for differentiation. In contrast, the retailer's store brand quality decision is shaped by three key strategic forces–the market expansion force, the retail margin force, and the consumer profitability force. The balance of these forces varies depending on the underlying distribution of consumers' quality consciousness and, therefore, leads to different store brand positions across different category environments, both in the base model as well as in the expanded model of multiple national brands and multiple store brands. We present some empirical evidence supporting these theoretical findings.

5 - Can Economy Private Labels Help Defend Against the Hard-Discounter Threat?

Mark Vroegrijk, Post-doctoral Researcher, KU Leuven, Korte Nieuwstraat 33, Antwerp, 2000, Belgium, mark.vroegrijk@kuleuven.be, Els Gijsbrechts, Katia Campo

Traditional retailers often employ price-based strategies to defend against hard-discounters. One increasingly used approach is the introduction of an economy private label (EPL) - a response that fits with the growing interest in multi-tiered private label programs. However, the jury is still out on whether these EPLs actually shield traditional supermarkets against the hard-discounter threat. To shed light on this issue, we conduct a "difference-in-difference" analysis across 48 product categories, in which we compare retailers' losses to hard-discounters in the absence versus presence of an EPL. Our results show that traditional retailers' vulnerability to hard-discounters varies widely across categories: while hard-discounter entry entails substantial sales losses in some categories, it hardly affects others. Linking these effects to the introduction of EPLs, we find that EPLs are not an effective defense tool "across-the-board": there are several categories in which traditional retailers are susceptible to hard-discounters, but where EPLs do not help improve their situation. Still, for a subset of categories in which they are harmed, traditional retailers can effectively reduce their losses by stocking such a low-tier private label. We identify category characteristics that drive the effectiveness of EPLs, thereby providing guidance to retailers on where to carry such products. We also find evidence of momentum, showing that as the EPL is rolled out across more categories, it becomes a more powerful "defense mechanism."

■ FD10

10- EMBA 1

Sales Force Performance Assessment

Contributed Session

Chair: Ahmed Timoumi, Doctoral Candidate, Koc University, Rumeli Feneri Yolu, CAS 171, Istanbul, 34450, Turkey, atimoumi@ku.edu.tr

1 - Metrics for Assessing Salespeople's Performance: An Empirical Approach

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Sales managers have to make several decisions such as where salespeople should be located, which ones should be sent for training or retraining and the type of training, and crucially which ones should be promoted or fired. These decisions required assessing the relative performance of salespeople along different dimensions. These evaluations are difficult as salespeople might be in different territories with different market potential, may be in different channels and sell different products. Even salespeople in the same territory selling the same products face a different customer mix. We propose a new set of metrics to assess salesforce performances using sales history data. Using a data set of automobile insurance sales to small business owners, we conceptualize sales performance as consisting of three dimensions: generating leads, ability to convert leads to customers and upselling. To assess the relative sales performance, we filter out the impact of systematic factors such as agent characteristics (e.g., channel type, territory, market size). Therefore, our metrics allows a direct comparison of a sales agent with any other agent. We also account for prospective customer characteristics that allow us to distinguish between salespeople who are truly capable and those who are fortunate enough to have gotten a customer mix with a high predisposition to buy. Finally, we provide a 'grade card' for each sales agent, using several metrics. By decomposing observed sales into customer characteristics, sales person's characteristics, these metrics can aid sales managers in diagnosing the sales agents' strengths and weaknesses and also in reward allocation. Our methodology is useful for a wide variety of applications, wherever relative performance needs to be judged.

2 - Does Salesperson Prioritization Pay Off?

Margot Loewenberg, Chair for Marketingand Market Research, University of Zurich, Andreasstrasse 15, Zurich, 8050, Switzerland, margot.loewenberg@business.uzh.ch, Markus Meierer, René Algesheimer

A firm relies heavily on the success of its salespersons. Often monetary rewards are regarded as method of choice to motivate salespersons. However, in recent years the effectiveness of non-monetary rewards has been proven for customers. Whereas customer prioritization got a lot of attention over the last years, comparable research on salespersons is few and far between. Filling this gap, we introduce the concept of salesperson prioritization. Salesperson prioritization is defined as bringing special attention to top-tier salespersons in the form of a non-monetary reward. We disentangle the relationship between prioritization and individual performance of salespersons by answering the following research questions: (1) Has salesperson prioritization a positive impact on a salesperson's individual performance? (2) Do the sales of a salesperson accelerate when getting closer to the necessary requirement for a reward? Answering these questions allows practitioners to increase the effectiveness of their incentive system. To answer our research questions, we use monthly sales data from 2005 till 2012 of 700 salespersons of a service firm. By applying a piecewise linear random effects model, we find that prioritizing salespersons has indeed a positive impact on their performance in the subsequent year. We are also able to confirm an acceleration of sales when a salesperson gets closer to the sales threshold which is required to be rewarded. This resembles a behavioral pattern that has been previously found in research on customer loyalty programs. We address the implications of these results in detail.

3 - Career History as a Determinant of Pay Level and Pay Structure of Sales Managers

Alireza Keshavarz, PhD Candidate, HEC-Paris, 1, Rue de la Liberation, ch53 - Residence Expansiel, Jouy en Josas, 78350, France, alireza.keshavarz@hec.edu

How do firms value industry, firm and occupation history of sales managers? Recent decades have been characterized by high instability in employment relationships. Sales management job in firms has one of the highest turnover rates that forces firms to constantly hire individuals with very diverse set of industrial and occupational experiences. As individuals with different career histories enter into similar positions, it is increasingly important to compare these different experiences in order to understand whether different routes of entry into the job affect subsequent outcomes such as pay level (total pay) and pay structure (ratio of variable to total pay). Using a 1/25th employee-employer matched panel of French population over 1976 to 2009 and drawing on human capital theory in labor economics and management literature I have developed and tested several hypotheses about sales managers' pay level and pay structure with respect to their career histories. The results suggest that, first, there is an inverted U-shaped relationship between both the number of firm and industry switches and the pay level for sales managers. Second, there is a U-shaped relationship between both the number of firm and industry switches and the ratio of variable to total pay for sales manager. Third, sales manager's experience in current industry increases the pay level and decreases the ratio of variable to total pay. Finally, greater experience in sales management occupation and greater number of switches across occupations both decrease the ratio of variable to total pay for sales managers.

4 - Optimal Delegation of Retail Sales Force Management and Compensation to the Manufacturer

Ahmed Timoumi, Doctoral Candidate, Koc University, Rumeli Feneri Yolu, CAS 171, Istanbul, 34450, Turkey, atimoumi@ku.edu.tr, Anne Coughlan, Skander Essegaier

Many retailers rely on a manufacturer to fully manage his brand's space in the store. This could include managing the sales force by designing and paying for their compensation plan. Why would a retailer delegate the compensation of its own in-store sales force, thereby losing control over them and their induced effort to a self-interested manufacturer? This paper suggests sales force compensation plans as a coordination tool in the channel. Sales response to salesperson effort depends on many factors. Some of these are related to the selling environment but others are related to the characteristics of the sold product. When the manufacturer has better information on these characteristics than the retailer because of his superior knowledge of his brand, he has less uncertainty about the sales effort response function and marginal sales productivity in particular. Hence, the manufacturer may actually be more efficient than the retailer in inducing optimal sales effort. This efficiency is shown to result in a lower per-unit cost of salesperson effort (commission) for the channel, which reduces the selling price given the same effort level. However, by delegating sales force compensation to the manufacturer, the retailer does lose part of her control over the sales to the manufacturer and thus risks suffering from manufacturer opportunism. We solve this tradeoff that the retailer faces and we investigate under what conditions the whole channel and the retailer are better off by delegating sales force compensation to the manufacturer.

■ FD11

11- EMBA 2

Conjoint Analysis

Contributed Session

Chair: Alexandru Degeratu, Senior Marketing Expert, McKinsey and Co., 55E 52nd Street, New York, NY, 10022, United States of America, Alexandru_Degeratu@mckinsey.com

1 - Identifying Relevant Attributes in Conjoint Analysis using Data Mining Techniques

Sebastian Maldonado, Universidad de los Andes, Avda. San Carlos De Apoquindo 2200, Las Condes, Santiago, Chile, smaldonado@uandes.cl, Ricardo Montoya, Richard Weber

One of the main tasks of conjoint analysis is to identify consumer preferences about potential products. Accordingly, different estimation methods have been proposed to determine the corresponding relevant attributes. Most of these approaches rely on the post-processing of the estimated preferences to determine the importance of such attributes. This work presents a new approach to identify the attributes that consumers use to evaluate alternatives in a choice-based conjoint context. In particular, we propose a method that simultaneously identifies consumer preferences while considering only the most relevant attributes. Our approach has two appealing characteristics (i) it is grounded on a Support Vector Machine formulation that has proved important predictive ability in marketing contexts and (ii) it obtains a more parsimonious representation of consumer preferences than the traditional model. We report the results of an extensive simulation study that shows that unlike existing methods, the proposed approach can accurately recover the model parameters including the relevant attributes. Additionally, we use a conjoint choice experiment to illustrate the characteristics of the proposed approach. The results show that the proposed method has better fit and predictive performance than traditional approaches and that improves the understanding of customer preferences.

2 - Optimal Experimental Designs for Nonlinear Conjoint Analysis: Solving the Conundrum

Agata Leszkiewicz, Universidad Carlos III de Madrid, Department of Business Administration, c/ Madrid 126, Getafe, 28903, Spain, aleszkie@emp.uc3m.es, Mercedes Esteban-Bravo, José Vidal-Sanz

The quality of results from conjoint experiments depends heavily on the product concepts evaluated by the respondent. To reduce the cost of experiment and respondents' fatigue, ideally they are presented with a combination of just a few alternatives, which allows efficient estimation of the preferences towards the product and its attributes. Thus optimal experimental design maximizes the information elicited from the respondent, or equivalently minimizes the parameter variance. CA literature considered a variety of utility models for which the variance is a function of both deterministic regressors and unknown model parameters. Therefore, the design efficiency depends not only on product attributes, but also on the part-worth coefficients to be estimated. Previous literature dealt with this puzzle by imposing assumptions on the unknown parameters: (1) choosing an arbitrary vector, or applying prior knowledge about the preferences; (2) postulating a probability distribution over the parametric space. Therefore, the design is efficient only if these assumptions are correct. Little is known about the robustness of the design efficiency, when the true parameters deviate from the assumed values. In the extreme case, if we knew the value of true parameters, there would be no reason to do the experiment in the first place. We propose a general approach to compute optimal conjoint designs in problems in which the covariance matrix depends on the unknown parameter. We solve this problem using efficient methods for robust optimization, and provide numerical examples for discrete-choice experiments, and other common nonlinear specification of utility functions.

3 - Accounting for Heterogeneity, Utility Covariances, or Both in Conjoint Choice Models?

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In the context of conjoint choice models, we propose a new finite mixture model framework for estimating two types of probit models. While the Finite Mixture Independent Probit (FM-IP) model assumes independence, the Finite Mixture Multinomial Probit (FM-MNP) model allows to consider dependencies between alternatives. In an empirical conjoint choice study, we compare both model types. The models are estimated under varying numbers of segments using an Expectation-Maximization algorithm. While the E-step involves a Gibbs Sampler to compute segment membership expectations, the M-step uses a BFGS algorithm to maximize the log-likelihood function. Model selection concerning the appropriate number of segments is carried out by using information criteria. While the FM-MNP model performs best on the aggregate market level (i.e. yields a 1-segment solution), a 2-segment solution results under the FM-IP model. Obviously, the absence of utility covariances in the FM-IP model is compensated for by assigning consumers to different market segments, while the FM-MNP model substitutes utility covariances for heterogeneity. We also find that choice share predictions are rather close between the FM-IP and FM-MNP model. Hence, both fit and predictive performance measures suggest that the simultaneous consideration of utility covariances and heterogeneity (FM-MNP model) does not pay off, at least not for the empirical data analyzed here.

4 - The Impact of Corporate Social Responsibility Violations on Marketing

Michael Riechert, PhD Student, Kuehne Logistics University - The KLU, Brooktorkai 20, Hamburg, 20457, Germany, michael.riechert@the-klu.org, Raoul Kübler, Soenke Albers

Corporate social responsibility (CSR) has become a major area in business research as well as in practice. Whereas most studies focus on the positive outcome of sustainable, social, or responsible corporate activities only little light has shed on the outcomes of unsocial corporate behavior so far. Current examples from corporate practice underline the possible risks of social misbehavior, like e.g. longtime market-share losses or insuperable image losses. To effectively react to these obvious threats marketers need to exactly know, how a CSR crisis does affect the effectiveness of the different marketing instruments. Using an experimental study and an innovative conjoint approach (Barter Conjoint), which incorporates social pressure into the measurement methodology, the authors investigate the moderating effects of a CSR crisis on the effectiveness of pricing and the product quality by calculating elasticities for both price and product performance. Furthermore, the authors investigate how these effects differ between product categories (hedonic and utilitarian goods) as well as violating and non-violating companies. The results show that pricing is severely affected by a CSR-violation whereas higher degrees of product quality may be able to compensate for CSR-violations. In addition, we show that the decrease in price effectiveness does not only affect the violator but also the non-violator while we cannot show any significant and unequivocal effect of product category. Further a CSR violation does increase the product quality elasticity of the non-violating product and simultaneously decreases the product quality elasticity of the violating competitor.

5- Learnings from 10 Years of Running Conjoints for Strategic Decision Making

Alexandru Degeratu, Senior Marketing Expert, McKinsey and Co., 55E 52nd Street, New York, NY, 10022, United States of America, Alexandru_Degeratu@mckinsey.com, Ankita Gupta

Conjoint-based market research is a frequently-used high-potential way of gaining valuable insights from the market. Unfortunately, the entire process, from defining the managerial needs to providing the conjoint-based managerial recommendations is so long and with so many hidden obstacles that it often falls way short of generating its potential impact. Some of the factors affecting the outcome are beyond researcher's control, but many are! After more than 10 years of conjoint-based market research, many hundreds of high-complexity conjoints, in tens of countries and with many product categories, we are ready to share with you some of the drivers of success you can - and should - control. This presentation will be focusing on factors during (a) sampling and sample design, (b) managerial and statistical design, and (c) conjoint estimation; and will give you a sense of what is achievable across markets (i.e., cultures) and product categories.

■ FD12

12- Geneve

Auctions

Contributed Session

Chair: Martin Spann, Ludwig-Maximilians-Universität (LMU), Munich School of Management, Geschwister-Scholl-Platz 1, München, 80539, Germany, spann@bwl.lmu.de

1 - Estimation of Beauty Contest Auctions

Hema Yoganarasimhan, University of California-Davis, One Shields Avenue, Davis, CA, 95616, United States of America, hyoganarasimhan@ucdavis.edu

Beauty contests auctions are procurement mechanisms where the auctioneer does not specify an allocation rule; instead he picks a winner based not only on price, but also other consider- ations such as reputation or quality. Unlike traditional price-only auctions, beauty contests have no closed-form bidding strategies and potentially suffer from multiple equilibria. We present an estimation methodology that addresses these challenges and can recover the cost distribu- tion of sellers in beauty contests. We formulate beauty contests as two-stage static games of incomplete information, and present a two-step method to estimate them. A key aspect of our two-step method is its ability to account for auction specific unobservables using finite unob- served types. We show that unobserved auction types are nonparametrically identified and can be recovered in the first step using an EM-like nonparametric algorithm. These are then used in the second step to recover cost distributions. We present an application of our method in the online freelancing context. We find that seller margins (marketpower) in this marketplace are 15-27%. We also find that not accounting for unobserved heterogeneity can significantly bias estimates of costs.

2 - The Impact of Individual-Level Consumer Surplus on Subsequent Willingness-to-Pay and Consumer Behavior – An Example from Online Auctions

Eric Greenleaf, Professor of Marketing, New York University, Stern School of Business, 40 West 4th Street, Rm. 813, New York, NY, 10012, United States of America, egreenle@stern.nyu.edu, Inhye Kang

Consumer surplus is a central concept in economics and consumer behavior. However, most studies of consumer surplus have focused on factors that tend to create or destroy surplus. More work is needed on how earning consumer surplus affects future consumer behavior. We examine this question in the context of individual bidder behavior in eBay auctions. We find that individual-level consumer surplus earned in these auctions increases bidders' willingness-to-pay, and other bidding behavior, in subsequent auctions. We also find that bidders react distinctively to earning zero consumer surplus, much as consumers react distinctively to a price of zero in the marketplace. These results support that earning consumer surplus has important temporal, downstream consequences for consumers.

3 - Measuring the Impact of Price Matching Guarantees on Price Dispersion and Willingness to Pay in Auctions

Peter Popkowski Leszczyc, University of Alberta, School of Business, Edmonton, AB, T6G 2R6, Canada, ppopkows@ualberta.ca, Ernan Haruvy

A price matching guarantee (PMG) is a promise to match a competitor's lower price. A price beating guarantee (PBG) is a promise to beat that price. We conduct a controlled field experiment involving pairs of simultaneous auctions to study the impact of the presence versus absence of PMG and PBG on consumer search, price dispersion and willingness to pay (WTP) for products. Results of a large scale controlled field experiment indicate that consumers switch less between auctions when either a PMG or a PBG is present, compared to auction pairs without a PMG. This results in higher price dispersion for auctions with either a PMG or a PBG. On average, selling prices are higher in auctions with a PMG or a PBG compared to identical auctions without a PMG or a PBG. We further observe increased bidder entry in auctions that provide a PBG.

4 - Competitive Lead Purchase by One-of-a-Kind Service Providers

Atanu Sinha, University of Colorado, Leeds School, Koelbel Hall, Boulder, CO, 80309, United States of America, atanu.sinha@colorado.edu, Yacheng Sun

The marketplace for one-of-a-kind services is large and fragmented. Providers' access to consumers has been facilitated by online infomediaries, which sell leads obtained from consumers to providers. Providers' lead-purchase decision has important implications for providers, consumers and infomediary. This decision is challenging because providers face uncertainties about (1) the potential cost of performing the service and (2) winning the project over competing providers. A unique data set from a national lead infomediary provides a novel opportunity to investigate the decision calculus behind service providers' endogenous lead-purchase decisions. Empirical analyses of home remodeling contractors and financial planners find similarities in the two types of providers (e.g., the willingness to buy a lead decreases with the number of potential providers) and striking differences. Remodeling contractors are more likely to buy leads with high mean value of consumer's investment, but less attracted to leads with high uncertainty in investment. The opposite is true for financial planners. We develop a theoretical framework to provide an explanation. The results suggest that the decisions of financial planners are more aligned with the model assuming rationality, compared with those of remodeling contractors. We finally discuss the implications of our findings for providers, the infomediary and consumers.

5- Pay What You Want as a Marketing Strategy in Monopolistic and Competitive Markets

Martin Spann, Ludwig-Maximilians-Universität (LMU), Munich School of Management, Geschwister-Scholl-Platz 1, München, 80539, Germany, spann@bwl.lmu.de, Robert Zeithammer, Klaus Schmidt

Pay what you want (PWYW) can be an attractive marketing strategy to price discriminate between fair-minded and selfish customers, to fully penetrate a market without giving away the product for free, and to undercut competitors that use posted prices. We report on laboratory experiments that identify causal factors determining the willingness of buyers to pay voluntarily under PWYW. Furthermore, to see how competition affects the viability of PWYW, we implement markets in which a PWYW seller competes with a traditional seller. Finally, we endogenize the market structure and let sellers choose their pricing strategy. The experimental results show that outcome-based social preferences and strategic considerations to keep the seller in the market can explain why and how much buyers pay voluntarily to a PWYW seller. We find that PWYW can be viable in isolation, but it is less successful as a competitive strategy because it does not drive traditional posted-price sellers out of the market. Instead, the existence of a posted-price competitor reduces buyers' payments and prevents the PWYW seller from fully penetrating the market. If given the choice, the majority of sellers opt for setting a posted price rather than a PWYW pricing. We discuss the implications of these results for the use of PWYW as a marketing strategy.

■ FD13

13- Luzern

Finance and Marketing IV: Time and Space

Contributed Session

Chair: Peng Zou, Associate Professor, Harbin Institute of Technology, No13. Fayuan Street, Harbin, 150001, China, zoupeng@hit.edu.cn

1 - How Business Cycles Change the Relationship between New Product Introductions and Stock Performance

Thomas Eichentopf, PhD Student, Rotterdam School of Management, Burg. Oudlaan 50, Rotterdam, 3062PA, Netherlands, teichentopf@rsm.nl, Berk Ataman, Gerrit van Bruggen

Despite the established positive relationship between innovations and value creation, many firms cut back on innovation budgets in difficult economic times and postpone the introduction of new products till a recovery begins. One reason why firms engage in such suboptimal behavior might be the dearth of empirical evidence on the value relevance of new product introductions at different stages of the business cycle, as previous studies focus mostly on the performance relevance of R&D expenditures. We seek to shed light on this issue by studying whether and to what extent different types of new product introductions (e.g., technology-based vs. market-based innovations, minor vs. major innovations) create firm value in periods of economic contractions versus expansions. Our basic premise is that during economic contractions shareholders respond more favorably to new product introductions that offer better value to the customers, whereas the positive response to new products that are minor modifications of existing alternatives will be attenuated or even reversed. During economic expansions, the difference in stock market response towards different types of new product introductions will partly disappear. To test these expectations we estimate a stock return response model using 22 years of quarterly data on new product introductions from a sample of firms operating in the consumer packaged goods industry in the United States. The results of this study will increase marketing managers' understanding of innovations during tough times and help them optimize return on innovation investments by adjusting the timing of new product launches based on macroeconomic conditions.

2 - Investors' Risk Reactions in Times of Crises: A Natural Experiment in Selected EU Countries

Nikos Kalogeras, Maastricht University, Tongersestraat 53, Maastricht, Netherlands, n.kalogeras@maastrichtuniversity.nl, Joost M.E. Pennings

Recent research showed that by decoupling the risk response behavior of individual market participants into the separate components of risk perception and risk attitude, a more robust conceptualization and prediction of their risk behavior is possible. Furthermore, it was argued that the influence of risk attitudes and risk perception on behavior can use dot formulate effective marketing strategies and public policies in case of crisis. The question arises whether or not the influence of these risk variables changes over time and, hence, whether marketing strategies and public policies must be adapted. The financial crisis in Germany, the Netherlands, and Greece in 2010 and 2012 provided us with a natural experiment to examine the relationship between risk attitudes, risk perceptions, and risk behavior over time. Implications for marketing-management and financial policy are discussed.

3 - The Influence Mechanism of Overseas Investment Bank Rating on Stock Fluctuation of Chinese Internet

Zhanpeng Yang, Zhongnan University of Economics and Law, Hubei, Wuhan, China, 273381625@qq.com

Whether the efficiency information of China's Internet enterprises which are Overseas Listing can be effectively transferred to capital market in credit crisis, the rating information provided by investment bank should played as a crucial bridge for list firms and investors. In order to probe the influence mechanism of the rating information provided by investment bank, we choose Chinese concept stocks related to a credit crisis in the United States capital market in 2011 to do our empirical research. Our study found that, release time of rating report, target stock price and enterprise target market play significant influence on the fluctuation of stock prices, and the ranking of investment bank has played an important moderating role.

4 - Corporate Social Responsibility and Market Value in Emerging Markets

Peng Zou, Associate Professor, Harbin Institute of Technology, No13. Fayuan Street, Harbin, 150001, China, zoupeng@hit.edu.cn, Qi Wang, Jinhong Xie

Along with the rapid growth in recent years, emerging markets have also encountered some rising social and environmental issues which draw increasing attention on CSR in these markets. Relative to a large number of CSR studies focusing on developed markets, however, research on CSR in emerging markets is rather scarce. In this study, we investigate the financial market responses to one of CSR disclosure - the Socially Responsible Investment (SRI) index announcement in emerging markets. The event study based on the SRI index announcement in China reveals that being included in an SRI index is associated with positive abnormal returns, implying that although emerging markets are in the early stage of developing CSR, doing CSR well to be listed on the SRI index are not only valuable to emerging-market firms but also plays an important role in building awareness. However, not all firms benefit equally from being included in an SRI index: The positive financial value is stronger for the consumer-products firms and the global expanded firms. Furthermore, while both a firm's advertising spending and R&D spending create values to stakeholder, the two marketing activities play different roles in creating financial value through the firm's CSR performance: While the financial value is strengthened by large R&D spending, it is weakened by large advertising spending. Our findings underscore the importance of CSR for local market firms and multinationals in emerging markets and provide some guidance to marketers and policy makers on how to promote and conduct CSR effectively.

■ FD14

14- Zurich

New Product Design

Contributed Session

Chair: K N Rajendran, University of Northern Iowa, 342 Curris Business Building, Cedar Falls, IA, 50614-0126, United States of America, raj.rajendran@uni.edu

1 - Affective Computing and New Product Development

Devanathan Sudharshan, James and Diane Stuckert BS/MBA Endowed Chair and Professor, University of Kentucky, Gatton College of Business and Economics, Lexington, KY, United States of America, devanathan.sudharshan@uky.edu, Rodoula Tsiotso, Ben Liu, Olivier Furrer

In New Product Development (NPD) processes identifying the right opportunities and the concept to be developed is the foundation on which the entire new product edifice rests. If done correctly, a strong successful structure will emerge. From the consumer research literature it is prima facie clear that adding formal models of emotion would enrich the NPD process. Up to recently, emotions have been ignored because affect has been misunderstood and hard to measure. New instruments such as the Emogram and the Product Emotion Measurement enable the measurement of consumers' emotional reactions to product and could assist in NPD. Further, there is a need to build into new products interactive capabilities that have the ability to interact using a full range of communication capabilities including emotion sensing and emotion inducing modalities. We sought to build a value-centered design model that would serve as a core structure to understand, develop, and guide further research in integrating emotion models into NPD. Our search, philosophically guided by the Lead User approach, led us to the field of Affective Computing. Significantly grown and developed in the last decade, this field is a multi and inter-disciplinary field at the cutting edge of modeling emotions for their implementation in computers. In order to do so, machine implementable models of emotion have to be developed and that is why this field becomes of paramount interest. Further, such models are calibrated using traditional psychological/marketing research as well as measurement methodologies from neurocognitive science. This paper provides some postulates and describes a model of emotion that can be implemented for NPD. It also suggests open research questions and presents some examples of implementation.

2 - How Long to Squeeze that Creative Juice? An Empirical Study of the Impact of Movie Production Timing

Fangyun (Tom) Tan, Assistant Professor, Southern Methodist University, Cox Business School, 6212 Bishop Blvd, Dallas, TX, 75275, United States of America, ttan@cox.smu.edu, Josh Eliashberg, Kartik Hosanagar

We empirically examine the financial impact of production duration in a multi-stage process of producing a creative product in the context of American film making. In particular, we analyze a novel data set to shed light on how the total production time and duration of individual stages affects box office revenues. We find that total production time is negatively associated with box office revenues. In particular, 1% additional total production delay may lower box office revenues by approximately 0.94%. Among the individual production stages, duration of post-production and distribution phases are critical, with stage duration of both stages being negatively associated with box office revenues. Our study is a first attempt to link operations management, marketing and film making. It can help studios better understand how to prioritize production planning and minimize negative impact of production delay.

3 - Mitigating Agency in Teams: An Empirical Analysis of Film Production in the US

Vishal Narayan, Assistant Professor of Marketing, Cornell University, 375 Sage Hall, Ithaca, NY, United States of America, vn28@cornell.edu, Vrinda Kadiyali

Many marketing activities take place in teams. Yet teams are susceptible to agency issues. First, agents or team members can free-ride on their team's efforts, especially if monitoring is hard and rewards are team-performance based. Second, there can be double-sided agency, i.e. the principal can misbehave, e.g. by misappropriating team output. Theory predicts that repeated interactions can reduce agency. To measure whether, what types of, and under what conditions, repeated interactions can improve team output, we use data from production teams of 1,123 U.S. films released in 1999-2005. The production team comprises the producer (the principal), director, screenwriter and lead/supporting actor/actress (all agents). We measure several individual-level and team-level experience and productivity measures. We also control for potential endogeneity of repeated interactions. The economic and econometric significance of number of repeated interaction and the primacy of principal-agent repeated interaction point us to agency mitigation and their effects on team output.

4 - What Does It Look Like? An Objective Measurement of Design Similarity

Thomas Schreiner, Universität Hamburg, Welckerstraße 8, Hamburg, 20354, Germany, thomas.schreiner@wiso.uni-hamburg.de, Thomas Fandrich, Mark Heitmann

Nowadays, markets for consumer products are increasingly saturated and technical product specifications are often similar. Consequently, product design is one of the dimensions gaining importance for differentiating from competitors. We operationalize product design for two different car segments (subcompact and mid-size crossover) based on images for three viewing angles (front view, driver's side view, rear view). For each car 122 characteristic points are placed, typical lines and angles (e.g., shoulder, angle of hood) are calculated and design complexity is measured by kilobyte size of compressed image file. Based on this, we measure design similarity for each segment and apply a search algorithm to represent survey data of 761 respondents on subjective similarities of car designs. Results show that the objective measure of similarity can reproduce the multidimensional scaling plot of consumers' similarity perceptions accurately. In addition, this procedure identifies the key drivers of visual design similarity. Importantly, these key drivers are almost identical for both car segments. Not unlike judgments of human faces, consumers examine the front view in great detail, whereas the rest of the car is considered based on its holistic external form. Our methodology equips product managers with a supportive tool for product positioning and sales predictions of new products, prior to running surveys on design perceptions.

5- Identifying Attributes that Really Matter using the Kano Method

K.N. Rajendran, University of Northern Iowa, 342 Curris Business Building, Cedar Falls, IA, 50614-0126, United States of America, raj.rajendran@uni.edu, Shashidhar Kaparthi

It is of great interest to product development as well as marketing personnel to identify product attributes that really matter to consumers. While the quality management literature suggests researchers are aware of Kano's method of identifying and classifying attributes to better understand customer-defined quality, a similar awareness appears to be lacking in the marketing literature. However, this does not imply that researchers in the marketing area are unconcerned with the nature of product attributes or their impact on satisfaction, loyalty, or even 'customer delight' (e.g., Oliver et al 1997, Finn, 2005). However, we feel that it is worthwhile exploring whether applying the Kano method to identify must be, one-dimensional, and attractive attributes of a market offering provides us with new insights. In the present exploratory study, we are applying the Kano method to evaluate the nature of various attributes of an institution of higher learning, which may be a first in its own right. We will be obtaining responses from current students, using a Kano type of questionnaire administered electronically through the web, about attributes related to both academic and non-academic domains. We hope not only to classify the attributes, and make appropriate recommendations, we expect to examine whether the importance and nature of attributes vary by student characteristics. Based on our experience with previous informal Kano studies (as class projects), we expect some intriguing results.

Saturday, 8:30am - 10:00am

■ SA01

01- Montreux

Social Media and the Brand

Cluster: Internet and Interactive Marketing

Invited Session

Chair: Mark Vandenbosch, Professor of Marketing, Western University, Ivey Business School, 1151 Richmond Street North, London, ON, N6A 3K7, Canada, MVandenbosch@ivey.uwo.ca

1 - The Impact of Social Media on Brand Loyalty

Yaniv Dover, Assistant Professor, Dartmouth College, Tuck School of Business, 6 Camp Brook Drive, Hanover, NH, 03755, United States of America, yaniv.dover@dartmouth.edu, Scott Neslin

We examine the relationship between the consumer's exposure to social media communications and brand loyalty. In relation to traditional media, social media channels exhibit increased technological flexibility, interactivity and include a "social" component. This potentially can induce a more profound effect on the consumer's long-term as well as short-term behavior. Especially interesting and a key issue for brand managers is the creation and maintenance of brand loyalty. Brand loyalty is manifested most prominently by higher intrinsic preference for the brand. This ensures the consumer buys the brand on a continual basis. However, brand loyalty may also be manifested in differential response to the brand's marketing efforts. For example, the brand loyal customer may pay more attention to a brand's advertising. Therefore, any investigation of the impact of social media on brand loyalty must consider how social media affects baseline preference as well as responsiveness to marketing. In order to address these issues we propose to use a Hidden Markov Model in which exposure to social media leads to different loyalty states. Each loyalty state is characterized by a different set of preference and market response parameters. The transition between loyalty states depends on exposure to firm- and peer-generated social media, marketing efforts across traditional and online media, and previous purchase behavior. This modeling approach offers insights into how firms can leverage social media outlets (and combinations of traditional outlets with social media) to affect long-term brand loyalty and provides a coherent framework in which the relationship between brand loyalty and consumer-peers interactions is measured and explained.

2 - Social Media - Effects along the Brand Value Chain

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With about 1.5 billion users worldwide, social media platforms and especially electronic word-of-mouth (eWOM) play a key role for marketing managers. As they lose direct control of their brands in a web 2.0 environment, there is an inherent need to understand the processes of how social media might impact their business. However, research outcomes are diverse, fragmented, and, due to a multitude of approaches, not easy to extract. By means of a qualitative meta-analysis, I analyze 94 top-tier social media articles and develop a framework to systematize effects of the exogenous construct eWOM on the different stages of the brand value chain (i.e. consumer mindset metrics, product and market performance, and financial performance). Contributions that address eWOM-effects on the consumer mindset consistently assume a positive link. However, they purely rely on experimental setups in artificial environments. Effects of eWOM on online market performance measures (e.g. online sales ranks) are also mostly positive. Nevertheless, the results get more ambiguous when more conclusive indicators (e.g. total sales) are considered. The research stream focusing on the impact of eWOM on financial performance relies on large scale datasets where volume (i.e. the total amount of eWOM interactions) is dominating valence (i.e. whether postings are positive, neutral, or negative) as performance indicator. Moderating effects along the brand value chain can be classified in four categories: sender, receiver, message and platform related. I give advice for companies how to use eWOM in viral marketing campaigns and how to predict future performance using eWOM conversations. From a research perspective, especially the concept of eWOM-valence is inconclusive and needs further clarification.

3 - Branded Social Games: Impact of Player's Behaviors on Brand Equity

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Branded social games represent a new advertising concept used by marketers to interact with their social community on social media. Their objectives are to drive traffic, reach prospective customers, and increase brand awareness. Their effectiveness on brand equity, the flow experience, and the influence on consumers' perceptions still remain to be answered. The aim of our research is to measure the effects of participation in a branded social game on the brand equity? In this way, we conduct two studies. The preliminary study examines the relationship between player's performance and antecedents of the flow experience. The results demonstrate that players having a medium score perceive more challenge than those with a high score. They also believe more in their ability to succeed the game than those with a low score. From this result, we have studied this category of players. In a second study, we have found that the participation in a branded social game tend to promote the flow experience, facilitate the learning process and modify brand perceptions.

4 - The Effect of Engagement in Social Media on Purchase Behaviors

Mark Vandenbosch, Professor, Western University, Ivey Business School, 1151 Richmond Street, North, London, ON, N6A 3K7, Canada, mvandenbosch@ivey.ca, Bobby Calder, Edward Malthouse

The rise of social media is enabling new brand contact points that are more engaging and interactive. Such interactive contact points have the potential to be highly effective because they require the consumer to 'lean forward' and actively process the brand meaning. But little is know about whether they affect purchase behaviors. Using data from Canada's AIR MILES Reward Program (AMRP), we analyze several studies that independently capture social media participation and AMRP "mile" accumulation through purchases. These before-after-with-control-quasi-experimental design studies cover a range of social media contacts including contests, events and Facebook contributions. We find that participation increases mile accumulation behavior over a control group and after controlling for pre-contest behavior. We propose an explanation for the effect, and discuss its implications and applications.

■ SA02

02- Lausanne

Adoption of Online Channels

Cluster: Internet and Interactive Marketing

Invited Session

Chair: Qiang Lu, Senior Lecturer, The University of Sydney Business School, Crn Codrington and Rose Streets, Sydney, Australia, steven.lu@sydney.edu.au

1 - Are Early Adopters of Online Channels More Profitable? Targeting Right Customers at the Right Time

Jing Li, PhD Candidate, Eindhoven University of Technology, Den Dolech 2, Eindhoven, 5600MB, Netherlands, jing.li@tue.nl, Umut Konus, Fred Langerak, Koen Pauwels

Multichannel firms need to identify profitable customers across channels and understand how customer buying behavior evolves over time. Innovation diffusion theory implies that distinct consumer segments learn about and adopt an innovation at different timing. However, it is still unclear whether early adopters of a new online channel, are more profitable than other customer groups, and more important, how the profitability of these groups evolves over time. Addressing these issues will help firms effectively allocate limited resources and adjust marketing strategies over time. This research investigates the dynamics of customer profitability from different customer segments. Specifically, we employ a non-homogeneous hidden Markov model together with a latent class model to model the transition among unobserved latent states of different customer segments identified on the bases of customer profitability, online channel adoption duration and multi-channel usage. This method allows us to examine the enduring effects of time-varying covariates on shifting customers to a different latent state. We use six-year customer transactional data provided by a major U.S. electronics retailer and over ten-year transactional data from a large France multichannel retailer that sells natural health products. Our data allows us to investigate the dynamics of customer profitability in different customer segments in different product categories. We offer implications for further research and practice.

2 - Balancing Channel Exposure and Channel Profits: Retail Platform Adoption and Management

Qin Zhang, Assistant Professor of Marketing, University of Iowa, 21 East Market Street, Iowa City, IA, 52242, United States of America, qin-zhang@uiowa.edu, Tat Chan, Fan Zhang

Selling products through an online retail platform (e.g., Amazon Marketplace and eBay stores) has been an increasingly popular channel choice for companies (manufacturers or retailers); in addition to the companies' own stores. Using a well established retail platform gives a company immediate exposure to its vast customer base. Moreover, the exposure may bring future sales to the company's own store as some customers may choose to buy from the company store directly after the initial experience with the company through the retail platform. Furthermore, the retail platform may bring in additional customers, who only become aware of the company store from the customers of the retail platform. However, there are also trade-offs of using the retail platform. It creates direct competition with the company store and may cause channel cannibalization among customers who already have knowledge about the company's own store and would have bought the products from the company directly if not given the option of buying from the retail platform. In this study, we examine the factors that affect trade-offs of adopting a retail platform and the strategies that can help a company maximize its profits from both channels. We first propose a simultaneous model of customers' channel choices and expenditure decisions, where non-pricing strategies like product assortments are the main marketing levers. We apply the proposed model to a unique individual level purchase data from start-up Chinese fruit company which sells premium fresh fruit in its own online store after initially only selling the products through an well-known online retail platform. Using the model estimates, we then conduct policy simulations to answer our research questions.

3 - Adding Clicks: Understanding the Impact of Adding an Internet Channel on Direct and Indirect Channel

Qiang Lu, Senior Lecturer, The University of Sydney Business School, Crn. Codrington and Rose Streets, Sydney, Australia, steven.lu@sydney.edu.au, Y. Yang, Y. Ulku

The popularity of the Internet has created a completely new distribution channel: the online channel, which enables firms to reach their consumers directly at relatively low costs. Consequently, the adoption of the Internet channel will have huge impact on how firms manage their relationships with their intermediaries, their pricing strategies and sales at the direct and indirect channels. In this paper, we build a hierarchical model to have a comprehensive investigation of adding an Internet channel on different channels. Specifically, we exam how the adoption of the Internet channel by a large hotel in Europe influenced price, price dispersion and sales across consumer segments and room types in different channels. Our results show that the Internet channel has different impact on the direct and indirect channels. And our results also suggest that the impact of adding the Internet channel varies across consumer segments and room types.

■ SA03

03- Bern

Emerging Markets in China

Cluster: Special Sessions

Invited Session

Chair: Yang Li, CKGSB, Beijing, China, yli14@gsb.columbia.edu

Co-Chair: Kaifu Zhang, INSEAD, Fontainebleau, France, kaifu.zhang@insead.edu

1 - Market Recovery Strategy after a Major Natural Disaster: An Empirical Study of 2008 Sichuan Earthquake

Qi Wang, Professor, State University of New York at Binghamton, P.O. Box 6000, Binghamton, NY, United States of America, qiwang@binghamton.edu, Yani Dong, Jinhong Xie, Wei Li

Natural disasters such as earthquakes, floods and hurricanes not only cause loss of life, property, and ecological resources, but also disrupt markets, creating severe social and economic impacts. How quickly and completely markets recover from natural disasters is determined, in part, by recovery strategies implemented by government authorities and local business. The potential role of marketing decisions by local governments and businesses in the recovery of disaster-stricken economies has received little academic attention. This study examines the effectiveness of such marketing decisions on tourism after the May 2008 earthquake in Sichuan, China. Our analysis yields several interesting findings. First, we find that the entrance price of a tourist attraction has a positive impact on sales before the earthquake, but a negative impact on sales after the earthquake. Second, we compare the effectiveness of two types of regional promotions sponsored by tourist attractions: (1) tradeshows held in a Chinese city, and (2) special events held at the tourist attraction itself. We find that neither marketing activity significantly affects tourist demand before the earthquake. However, during the recovery period, holding special events at tourist attractions significantly stimulates tourist demand. Finally, our results show that while tradeshows sponsored by tourist attractions have no impact on demand either before or after the earthquake, tradeshows held by government after the earthquake significantly increase tourist demand. These findings identify some unique characteristics of tourism in emerging markets and provide useful guidance to the government and tourism industry on how to rejuvenate demand after natural disasters.

2 - An Empirical Investigation of the Rise and Fall of the Chinese Group Buying Industry

Chunhua Wu, University of British Columbia, Sauder School of Business, Vancouver, BC, Canada, chunhua.wu@sauder.ubc.ca, Xinlei (Jack) Chen, Ting Zhu

Following the success of Groupon Inc., thousands of group buying platforms have emerged in the Chinese market since 2010. Meanwhile, the majority of them have died by the end of 2012. It is quite unusual to observe such tremendous industry dynamics in a very short time window. In this research, we build an empirical model to investigate the factors that lead to the rise and fall of the industry. We are particularly interested in understanding the role of venture capital in driving the platforms' strategic entry and exit decisions. Using a unique panel data that tracks the performances of more than 2,000 group buying platforms and the investment decisions from venture capital firms, we are able to recover the industry dynamics and perform counter-factual analysis that uncovers the impact of venture capital on industry evolution.

3 - The Heterogeneous Impact of Studio Advertising versus Online Word of Mouth: Evidence from Chinese Movie Industry

Yang Li, CKGSB, Beijing, China, yli14@gsb.columbia.edu

The Chinese motion picture industry has undergone fast growth in recent years (i.e. expected to surpass U.S. by 2020). The majority of the moviegoers in China are young adults who are also heavy Internet users. This study investigates how Chinese movie consumers respond differently to official information that stems from movie studios and to information created by their peers, and how information about a movie's quality that originates from reputable sources (i.e., critics) interacts with reviews created by regular consumers. Preliminary results show that, for movies of certain genres, moviegoers are heavily influenced by online word-of-mouth, and movie studios in general have not sufficiently invested on online marketing sources compared to traditional advertising channels.

4 - Social Identity and Consumption - The Effect of the Hukou System on Household Consumption in China

Mandy Hu, Assistant Professor, The Chinese University of Hong Kong, Room 1105, Cheng Yu Tung Building, Shatin, NT, Hong Kong - PRC, mandyhu@baf.cuhk.edu.hk, Ninghua Zhong, Ming Lu, Binkai Chen

In China, the household registration system (Hukou) segments the entire population into two groups: people with urban Hukou and people with rural Hukou. They are mutually exclusive. Hukou is an important identity for the Chinese and determines many aspects of their lives. However, unlike gender or race, Hukou status is not directly visible. An individual inherits his Hukou status at birth. He may change it later in the life through a few channels. Traditionally urban Hukou is considered to be superior to the rural one. Using nationally representative data on urban household consumption, we compare the expenditure compositions of three groups of people in Chinese cities: people who are born with urban Hukou, people acquire their urban Hukou later and people with rural Hukou. Built on social identity theory, we show that people with acquired urban Hukou identify themselves with urban Hukou holders using visible goods (clothing, housing, transportation and telecommunication). Meanwhile, they devote larger shares of expenditure to durable and self-benefit consumptions (household equipment, medicine and healthcare) than the other two groups. People born with urban Hukou, on the other hand, differentiate themselves by consumptions related to self fulfillment (education, culture and entertainment). We demonstrate that income, household demographic information and institutional policies only partially explain the differences.

■ SA04

04- Monch

Game Theory: Pricing and Communication

Contributed Session

Chair: Neil Bendle, Assistant Professor of Marketing, Western University, Ivey Business School, 1151 Richmond Street North, London, ON, N6A 3K7, Canada, nbendle@ivey.uwo.ca

1 - Sponsored Search vs. Search Engine Optimization: Competitive Strategies for Internet Retailers

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We formulate a game-theoretic model of competition between a small Internet retailer and a branded retailer such as Amazon, where customer traffic is directed to the retailers through organic or sponsored links at search engines. Thus, retailers can invest in search engine optimization (SEO) to improve customer traffic through organic links, or invest in keyword bidding to get this traffic through sponsored links. We uncover several insights regarding the mix of investments in these two options. For example, when bid costs are low, it would appear that the small retailers can invest only in sponsored links. However, this is precisely when we find that these retailers invest in SEO. The reason is at low bid costs, the branded retailer also invests in sponsored search as a defensive strategy to counter the small retailer. Hence, the small retailer must invest in SEO to gain customers. Another issue we explain is the observation in popular press that that unbranded retailers may be underinvesting in SEO while overinvesting in sponsored search. We find that at intermediate values of bidding costs, the small retailers choose not to invest in SEO, and rely only on sponsored links. The reason is by making this choice, the small retailers benefit by neutralizing the branded retailer's incentive to compete for sponsored links.

2 - The Effect of Location on Pricing Strategies

Marielle Non, Assistant Professor, University of Groningen, P.O. Box 800, Groningen, 9700AV, Netherlands, m.c.non@rug.nl

Every day low pricing (EDLP) is a well-known pricing strategy, which originated among supermarkets, but is also increasingly used in retailing of durables, e.g. electronics. Previous research on the strategic choice of a retailer for an EDLP strategy has mainly focused on the role of the consumer shopping basket, but this factor seems to play only a minor role for durables. Instead of the shopping basket, this paper considers the effect of location of a store on the pricing strategy. The analysis shows that retailers that are located close to competitors prefer an EDLP strategy. In contrast, retailers that have no competitors close-by prefer a High-Low (HILO) pricing strategy, with a relatively high standard price, and temporary deep discounts. Another outcome of the game-theoretic model is that the HILO retailers mainly attract cherry-picking consumers, who do not mind shopping around to find the best deal. Time-constrained consumers with substantial travel costs instead tend to visit a cluster of EDLP retailers. The EDLP retailers have higher profits than the HILO retailers, mainly because the EDLP retailers attract more traffic to their stores. However, if retailers are free to choose their location, not all of them choose to be close to competitors, since a very strong concentration of retailers might compete away most profits.

3 - Why the Meek Won't Inherit Madison Avenue (or Wall Street or Even Main Street)

Neil Bendle, Assistant Professor of Marketing, Western University, Ivey Business School, 1151 Richmond Street North, London, ON, N6A 3K7, Canada, nbendle@ivey.uwo.ca, Mark Vandenbosch

Market logic suggests that selection pressures change participating populations, regardless of the competitors' psychological penchants and cognitive limitations. Some use this logic to argue that the findings of behavioral economics may apply only to poorly functioning markets. To investigate this possibility, we examine evolution in markets and overturn traditional market logic by arguing that selection pressures may drive market participants towards non-standard behaviors. Using the canonical evolutionary game, chicken, we analyze whether overconfidence could thrive despite selection on profits. We demonstrate that, given a full range of approaches in the initial mix, overconfident participants form part of the population in equilibrium. Furthermore, we show that when reputation matters in the market (e.g. for bankers, lawyers and advertising executives), underconfidence will be eliminated, but overconfident actors will persist and may even dominate the entire population. The finding that markets with selection pressures can encourage non-standard economic behavior in equilibrium increases theoretical support for behavioral economics.

4 - When the Buyer is Not the User

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Much of the academic literature in marketing focuses on studying a buying process where companies sell to consumers who maximize their utility choosing between different available options in a product category. However, in many markets the purchasers of the product are not the same as the users. For example, in the market for toys, companies face the challenge of having to implement appropriate Marketing strategies while reconciling preferences of children and parents that often oppose each other. We analyze a game theoretic model of such a market where a company tries to reach a segment of consumers that does not make the purchase decision. However, purchasers' utility depends partly on user's enjoyment of the product. We derive the optimal pricing and advertising policy for the firm in this scenario while considering both push and pull strategies. We extend our analysis to the competitive case.

5- Coalitions, Auctions and Bargaining in the Market for E-Books

Rajeev Kohli, Professor, Columbia University, 506 Uris Hall, Graduate School of Business, New York, NY, 10027, United States of America, rk35@columbia.edu

We characterize the core of a cooperative game in which a publisher sells e-books through one or both of two retailers, Apple and Kindle. We show that an auction of non-exclusive selling rights using the Vickrey-Clarke-Groves (VCG) method obtains an outcome in the core and yields the highest-possible payoffs among all core outcomes for both Apple and Kindle. The publisher obtains higher value than from the VCG auction if it engages in strategic, sequential bargaining with the two retailers. The resulting subgame-perfect Nash bargaining solution is also in core of the game. The minimum value that the publisher can obtain from bargaining is the entire value generated from sales to consumers who own both Apple and Kindle devices. Notably, bargaining in the present case yields a unique solution, despite the fact that the total bargaining value is not constant. This result is in contrast with results that strategic bargaining involving more than two players does not typically yield a unique solution even when the total bargaining value is constant.

■ SA05

05- Montblanc

Channel Strategy

Contributed Session

Chair: Chi-Cheng Wu, Professor, National Sun Yat-sen University, 70, Lien-hai Road,, Kaohsiung, Taiwan - ROC, chicheng@mail.nsysu.edu.tw

1 - Strategic Decentralization with Inventory Commitments

Sudheer Gupta, Associate Professor, Simon Fraser University, Beedie School of Business, 500 Granville Street, Vancouver, BC, V6C 1W6, Canada, sudheerg@sfu.ca, Harish Krishnan

We analyze strategic decentralization incentives in competing supply chains when firms face stochastic price sensitive demand and need to decide on both inventory levels and retail price. Two competing supply chains are modeled. Manufacturers choose whether to delegate decision rights to pricing and/or inventory decisions to retailers. We show that delegation of both price and inventory decision leaves both manufacturers worse off; complete delegation is thus equivalent to delegating the inventory decision alone. However, manufacturers, and the supply chains, may have an incentive to partially delegate decision rights. We show that delegation of price decision to retailers while retaining control of inventory decision (which is equivalent to a vendor-managed inventory contract), restores the strategic benefits of decentralization as extensively analyzed in the literature. Next, we analyze returns policies (buybacks) and show how such contracts could also be used to restore strategic decentralization effects. Our work thus integrates the diverse literature in channel structure and supply chain management. We generalize decentralization incentives in channel structure decisions to include stochastic demand and inventory considerations, while providing a novel, strategic explanation for certain supply chain contracts that have primarily been explained via efficiency-enhancing arguments.

2 - Channel Strategy When Consumers Comparison Shop

Sridhar Moorthy, University of Toronto, 105 St. George Street, Toronto, ON, Canada, moorthy@rotman.utoronto.ca, Yongmin Chen

This paper analyzes consumers' shopping behavior and its implications for retailers and manufacturers. In the real world, some retailers sell only one brand in a category while others sell multiple brands. A manufacturer can choose to become a single-brand retailer by integrating forward, but becoming a multibrand retailer requires the cooperation of other manufacturers willing to sell through its retail operation. Retailers' retailing strategy and manufacturers' channel strategy are thus intertwined, and both are informed by consumers' shopping behavior. This paper argues that consumer shopping costs creates a demand for multi-brand retailing, but manufacturers have to weigh brand loyalty, store loyalty, and channel coordination considerations in deciding how to reach their markets.

3 - Channel Structure and Money-back Guarantee Policy

Kezhou Wang, University of Illinois at Urbana-Champaign, 350 Wohlers Hall, 1206 S. Sixth Street, Champaign, IL, 61820, United States of America, kwang6@illinois.edu, Yunchuan Liu

We study retailers' incentives to provide money-back guarantee ('satisfaction guaranteed or your money back' policy) when selling a single product in a competitive environment under different channel structures. We analyze a game where two competing retailers simultaneously make decisions whether to offer money-back guarantees (MBG) under each of the three different channel structures: I-I (both channels are integrated), I-D (mixed structure where one channel is integrated and the other is decentralized), and D-D (both channels are decentralized). Our results show that whether a retailer offers MBG depends crucially upon the perceived likelihoods of product return of the two retailers, as well as upon the distribution channel structure in which the retailers compete. Interestingly, the high-type retailer (i.e., the retailer with relatively lower likelihood of product return) is more likely to offer MBG in an integrated channel than in a decentralized channel (I-D vs. D-D, and I-I vs. I-D), whereas the low-type retailer is more likely to offer MBG in a decentralized channel than in an integrated channel (I-D vs. I-I, and D-D vs. I-D). The manufacturer's and the retailer's different incentives to offer MBG may shed light on why offering MBG is most common among manufacturers with low probability of product return and retailers with high probability of product return.

4 - Manufacturer's Response to the Retailer's Extended Warranty

Chi-Cheng Wu, Professor, National Sun Yat-sen University, 70, Lien-hai Road,, Kaohsiung, Taiwan - ROC, chicheng@mail.nsysu.edu.tw, Lu Hsiao, Ying-Ju Chen

Traditionally, the role of retailers is to take responsibility of selling to the consumers the physical products designed by the manufacturers. Nevertheless, in the after-sales service market, they become capable of offering their own 'products,' the extended warranties, on top of the manufacturers' base warranties. In such a scenario, the manufacturer and the retailer collaborate in selling the physical products, but compete in selling the warranties in the after-sales market. Confronted with the salient threat from the retailer's capability of offering extended warranties, we investigate the profitability of three strategies from the manufacturer's perspective in a distribution channel: 1) deter - selling his own extended warranty and deterring the retailer; 2) acquiesce - inducing the retailer to offer her own extended warranty, and 3) collaborate - repairing for the retailer's extended warranty. We find that acquiescing to or collaborating with the retailer may be beneficial for the manufacturer. This possibility arises because when the manufacturer honors the retailer's capability, he no longer has to over-distort his base warranty to deter the retailer's strategic movement. The manufacturer may benefit from collaborating with the retailer because he can indirectly affect the retailer's extended warranty design and extract revenue from the retailer through appropriate contractual arrangements. Moreover, the manufacturer may respond to the retailer's threat by lengthening the base warranty rather than the extended warranty that bears the brunt of the retailer's challenge. Notably, even if the retailer is more cost efficient in repairing for consumers, acquiescing to the retailer may not necessarily benefit the manufacturer.

■ SA06

06- Monterosa 1

Social Influence and Culture

Contributed Session

Chair: Umut Kubat, PhD Candidate, Akdeniz University, Meltem Mah. 8. Cad., Etmen Sit. E Bl. K:3 D:9, Antalya, 07030, Turkey, umutkubat@akdeniz.edu.tr

1 - Exploratory Study on Changing Consumer Cultural Trends in a Developing Economy

Huma Amir, Assistant Professor, Institute of Business Administration, Room 108, Main Campus, University Road, Gulshan e Iqbal, Karachi, 75270, Pakistan, huma.amir@hotmail.co.uk

Study examines extent of change in attitudes of consumers towards bridal gold jewelry and has its foundation on self-concept and lifestyle theories. Two focus groups of representative respondents revealed factors to be tested as conformity to social norms, theft concerns, materialism, consumer psychographics, and financial security and 129 mothers-in-law-to-be and brides-to-be belonging to middle-income social classes B and C were surveyed. Findings reveal that though wearing gold jewelry at weddings is not considered conspicuous consumption, it no longer appears to play a pivotal role in establishing status and worthiness. Cluster analysis identified two distinct segments: Group 1 considered themselves more trendy, modern in their outlook, and rather spendthrift, preferred to have their own individual fashion style and were concerned about their looks. Group 2 showed less inclination towards modernity, were more careful in their expenditure and less concerned about their looks and rated higher on making their own personal fashion statement. Whereas security issues and fear of theft were considered transient features that deterred brides from wearing gold jewelry, fashion trends and a modern outlook resulted in an attitude shift to stylish, non-traditional jewelry of less expensive material, more so in Group 1 than in Group 2 who still insisted on possession and presenting of gold jewelry even when the bride wore contemporary non-gold ornaments that matched the bride's outfit. The study also reveals that though gold is still being bought in abundance, and will continue to do so in the near future, a trend has been set which will gain momentum as consumer choices increase and tolerance towards non-conformity to the norm of gold adornment increases.

2 - The Role of Social Comparison Direction and Comparison Target in Service Delays

Ying Ho, University of Macau, FBA, University of Macau, Macau, yingho@umac.mo, Nga Cheng Chan

Referential explanation (e.g., comparison with other customers) is often used to reduce the negative effect of service failures such as service delays. Existing studies focus on downward comparison with the belief that a consumer will feel less unhappy if s/he is compared to other consumers who have worse experience than him/her. This research argues that during service delays, customers often are uncertain about how long the service delay will last. Given the uncertainty, upward comparison may be an effective strategy if the consumers assimilate with the upward referent group and thus believe that their final outcome will be as good as the comparison target. Focusing on two major elements of social comparison, namely comparison direction (i.e., upward comparison vs. downward comparison) and comparison target (i.e., similar others vs. dissimilar others), we propose that assimilation/contrast mode that the consumers engage in may affect the way they interpret social comparison information and hence their satisfaction and revisit intention. Existing research on assimilation and contrast (e.g., Horen & Pieters, 2012; Ruys et al., 2006) suggests that whether the consumer will assimilate with or contrast from the comparison target depends on whether they consider the comparison target as a valid comparison benchmark. We expect comparison with other similar consumers may signal the presence of comparison standard and lead to contrast. Comparison with dissimilar others signals the absence of a comparison standard and thus results in assimilation. As a result, downward (upward) comparison may be more effective when making social comparison to similar (dissimilar) others.

3 - Fake it Till You Make it: Effect of Promoting Domestic Brand as Foreign on Consumer Behaviour

Harsh Dadhich, Doctoral Student, Indian Institute of Management Ahmedabad, D14 R19, Ahmedabad, 380015, India, harshd@iimahd.ernet.in

Perceived brand origins, whether correct or not, influence consumers' choices (Thakor & Lavack, 2003). Brands, even domestic, often project themselves to be of foreign origin through advertising, names, styling and other associations with foreign countries. Consumers in emerging markets have been found to have inclination towards foreign brands (Kinra, 2006; Godey et al, 2012). However, this cannot be generalised across product categories as product categories may or may not have country specific anchor to them (Usunier & Cestre, 2007). As per theory of impression management consumers use purchases to create a favourable social image (Eagly & Chaiken, 1993). Literature supports that perception towards foreign sounding products is higher in luxury and hedonic categories (Godey et al, 2012). Also, social desirability can lead to conspicuous consumption-likely to be in form of foreign brands. Similarly, consumers are more satisfied with products from other countries when origin matches with product specifications (Darling & Arnold, 1988). This paper posits that: (P1) consumers with higher social desirability are likely to have higher purchase intent towards foreign brands. (P2) Consumers are likely to have higher purchase intention towards brands perceived as foreign in the product categories which have natural country-specific anchors. (P3) For luxury products, consumers are likely to draw higher satisfaction from foreign brands. As per cognitive dissonance theory, when true origins are learned, the consumers' belief about a brand's origin changes, making them feel betrayed (Festinger, 1957). (P4) Consumers have negative evaluation of domestic brands which were promoted as foreign. (P5) Consumers draw less satisfaction from domestic brands which were promoted as foreign.

4 - Acculturation, Brand Cultural Symbolism and the Role of Advertising Language on Brand Evaluations

Umut Kubat, PhD Candidate, Akdeniz University, Meltem Mah. 8. Cad., Etmen Sit. E Bl. K:3 D:9, Antalya, 07030, Turkey, umutkubat@akdeniz.edu.tr, Vanitha Swaminathan

This research examines how biculturals (i.e., people who identify with two distinct cultures) respond to bilingual advertising. We argue that biculturals can be distinguished into multiple types depending on their acculturation (i.e., whether biculturals are synthesized biculturals or host-culture-oriented biculturals) and that this acculturation type moderates the impact of bilingual advertising.The research context is people of Hispanic origin residing in the United States. Across three experiments, we show that a brand's cultural symbolism moderates the impacts of bilingual advertising (vs. English-language advertising) and acculturation type on brand liking. This research also highlights the role of bicultural identity integration (BII) as a key process mechanism that mediates these effects. We argue that the mediating role of bicultural identity on reactions to bilingual advertising only holds for brands that are low in cultural symbolism. Finally, we provide additional evidence of process by manipulating BII. The results reveal that participants who are asked to think about commonalities between the host and the home cultures are significantly more likely to evaluate bilingual ads favorably than participants who are focused on differences between the two cultures.

■ SA07

07- Monterosa 2

Bundling

Contributed Session

Chair: Sreya Kolay, Assistant Professor, University of California, Irvine, Paul Merage School of Business, Irvine, CA, 92697, United States of America, skolay@uci.edu

1 - A Conjoint Model for Self-Designed Service Bundles

Raghuram Iyengar, University of Pennsylvania, The Wharton School, 3730 Walnut Street, Philadelphia, PA, 19104, United States of America, riyengar@wharton.upenn.edu, Kamel Jedidi, Vithala R. Rao

Many services (e.g., AT&T, Verizon, and Comcast) are increasingly providing the flexibility for their customers to build their own bundles. For instance, AT&T offers two different phone services–landline and wireless–and customers can choose either one of these services or a bundle and subsequently customize each service with available upgrades. We develop a conjoint model for how consumers choose among services, bundles, and service upgrades. Our model is grounded in utility theory and allows for a common budget constraint. It also allows for the bundle utility to be sub-additive, additive and super-additive to accommodate bundling situations where the bundled services are complement, independent, or substitutes. We use a hierarchical Bayesian procedure to estimate the proposed model and capture consumer heterogeneity. We test the proposed model on data from Monte-Carlo simulations and data from a choice experiment where consumers are asked to choose among self-designed services and service bundles. We show how the model can be used for demand estimation and pricing of services, bundles, and upgrades.

2 - Bundling of Competing Manufacturers' Products

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In the package goods industry retailers commonly promote bundles which comprise of products made by competing manufacturers. According to the trade press this can cause tension between the manufacturers and retailers. In this study, we seek to examine when bundling of competing manufacturers' products can benefit not only the retailer but one or both of the manufacturers. As a benchmark we will first examine a setting where the two manufacturers simultaneously decide their product strategy, which entails choosing one of three options: (a) sell the two products separately (b) offer only the bundle or (c) offer the bundle and the products separately. Given the product strategy, the manufactures decide the wholesale prices and the retailer then sets the retail price. We next examine a setting in which the manufacturers set the wholesale price of their products and allow the retailer to decide whether or not to bundle. In the event that the retailer decides to bundle he also decides which bundle to offer. In contrast to the benchmark the retailer may decide to create a bundle comprising of the competing manufacturers' products. The profitability of these scenarios will depend on consumers' preferences for the bundle comprising of competing manufacturers' products. We will empirically estimate these preferences using a conjoint experiment and then take these preferences as given and characterize the optimal bundling strategies.

3 - Optimal Selling Strategies for Sequentially Offered Events

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Event organizers often sell a series of events that occur sequentially over time, for example, concert series with multiple performers, film festivals, and sports tournaments. Consumers may enjoy more than one event in the series, and the events may differ in popularity with the audience (e.g. two operas of different popularity in successive months, pre-season games followed by more popular regular-season games). In this paper, we examine the optimal pricing strategy of such an event organizer. We analyze how the event organizer's decision on whether to sell events in a bundle and/or individually and how to price the bundle and individual events are influenced by the following factors: (i) the order in which events occur-i.e., the more popular event followed by the less popular event or vice versa; (ii) the magnitude of difference in relative popularities of events; and (iii) whether the seller can credibly commit upfront to the price of the future event. We show that while the order in which events occur plays no role in the seller's optimal pricing when it can commit upfront to the price of the future events, it does affect the seller's pricing strategy when it cannot commit upfront to the price of a future event, and furthermore, the seller prefers to introduce the less popular event first. We also show how the seller's optimal pricing strategy may range from offering full mixed bundling (the bundle of the two events as well as both events separately) to offering partial bundling (the bundle and only one event separately) as the difference in popularity of the events increases.

4 - Bundling, Inter-Temporal Pricing or Both? A Normative Assessment

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Bundling and inter-temporal pricing are two pervasive forms of price discrimination. Yet the combined power of these strategies has remained unexplored in academic research. Our study examines the appeal of hybrid strategies in which the two forms of price discrimination are combined. Real world motivation for our study comes from Walmart's use of such hybrids in the DVD category. Our model has a local monopolist offering two products to a market of strategic and myopic consumers. The seller incurs zero or positive marginal cost on each product. The seller's baseline strategies are the three static bundling strategies–pure components, pure bundling, and mixed bundling–and traditional price skimming. We compare these against three hybrid strategies: (a) pure components in period 1 followed by pure bundling in period 2; (b) pure bundling in period 1 and pure components in period 2; and (c) sequential pure bundling. Our results suggest that hybrid forms of price discrimination can be superior, though not always. Pure bundling in period 1 followed by pure components in period 2 is quite appealing as a hybrid strategy. It is optimal when marginal costs are significant and many, but not all, consumers are strategic. Sequential pure bundling is optimal under low marginal costs. However, when the market consists of strategic consumers only, traditional mixed bundling is optimal. When a majority of consumers are myopic, price skimming is best. We also present results on pricing patterns under the optimal strategies.

■ SA08

08- Edelweiss

Cause Related Marketing

Contributed Session

Chair: Reetika Gupta, Associate Professor of Marketing, Lehigh University, 621 Taylor Street, Bethlehem, PA, 18015, United States of America, reg205@lehigh.edu

1 - Fighting for a Cause or Against It: A Longitudinal Perspective on Revenue and Survival

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Nonprofit charities, unlike most for-profit organizations, face a unique challenge in having to persuade consumers with little to no spending in traditional advertising. Many times, the only means of persuasion is in a charity's name, which, for example, could be framed as positive (i.e., 'for' something) or negative (i.e., 'against' something). While research shows that negative messages have greater immediate impact than positive messages, much less is known in the long term. That is, while a negative frame may still outweigh a positive frame over the long term, a reversal is possible. To test these opposing predictions, we aim to answer two key questions. First, which type of frame, positive or negative, is likely to garner greater short term versus long term contributions? Second, is a negative framed charity likely to survive longer than a positive charity, or vice versa? To answer these questions, we use data submitted by all charities filing with the Internal Revenue Service over a ten year period, utilizing hierarchical linear modeling to examine revenue patterns over time and survival analysis to study which types of charities are more likely to survive. In this research, we find greater influence of a positive versus negative frame over time. Theoretically, in examining the less explored longitudinal influence, we inform existing framing research with the finding that a positive frame prevails over a negative frame in the long term. From a practical perspective, our findings suggest that the manner in which a charity is framed can influence one's altruistic behaviors differently over time, giving cue to charities in selecting a name based on their strategic aims. Our empirical findings also extend into such areas as economics and quantitative modeling.

2 - Fear vs. Hope: Organ Donation Decision

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The severity of organ donor scarcity has become governments' challenge around the world. More than 100,000 people need life-saving organ transplants yielding an average of 18 deaths a day in the United States. In this study, we aim to provide insight into the scarcity of organ donation problem by examining how hope and fear influence organ donation decision processes in the context of no default option. In particular, cultural related driven beliefs like superstition in addition to knowledge, altruistic, and reciprocity are investigated. Using the 2004 Thai National Statistical Office survey data, a series of multinomial logit models are estimated. We test organ donation decision (donate, unsure, not donate) against fear derived from superstitious beliefs, hope on altruistic beliefs, and fear from reciprocity beliefs. We find that the forward looking fear from superstitious beliefs discourages organ donating decision whereas fear from reciprocity beliefs and hope based on altruistic beliefs boost organ donation. Education serves as a shield against fear from superstitious beliefs. If respondents fear to be on the receiving end, the detrimental effect of fear of losing organ in the next life is mitigated. Monetary incentive is not a significant determinant for organ donation decision. We find that the 30-49 and 60+ segments are potential targets for organ donation campaign, while its effectiveness on females is rather limited. Implications of boosting organ donation are then discussed.

3 - Crossing the Recycling Bin Boundary: The Effect of Product Distortion on Product Disposal Decisions

Remi Trudel, Boston University, 595 Commonwealth Ave., Boston, MA, United States of America, rtrudel@bu.edu, Jennifer Argo

This research investigates the impact of product distortion, which arises during the consumption process, on a consumer's decision to recycle a product or throw it in the trash. A field study and five laboratory studies find that if the consumption process distorts the product sufficiently from its original form and function (i.e., changes its size and/or aesthetics), it is perceived as less useful and in turn is more likely to be thrown in the garbage (as opposed to recycled). The results also show that product distortion impacts recycling behavior irrespective of the overall amount or volume of material. We additionally rule out alternative explanations related to effort and perceived impact on the environment. The findings are of interest to both behavioral researchers and social marketers with implications for society as a whole.

4 - The Heritability of Preferences for Eco-Friendly Products

Arvind Rangaswamy, Pennsylvania State University, Smeal College of Business, University Park, PA, United States of America, arvindr@psu.edu, Huanhuan Shi, Min Ding

What are the determinants of consumer preferences for eco-friendly products? Genetic predisposition could be a key determinant, but this is a characteristic that has received limited attention in the literature. Studies in behavioral genetics have demonstrated that genetic factors do account for a significant proportion of the heterogeneity in such pro-environmental traits as pro-social tendency, altruism, and other dimensions of personality. In this study, we collected data from about 350 adult twin pairs to investigate the heritability of preferences for eco-friendly products. We measure an individual's general preferences for eco-friendly products as well as preferences for eco-friendly product attributes via conjoint measurement. We also explore the extent to which gene-environment interactions shape these preferences. Preliminary results indicate that certain types of product preferences for eco-friendly products are driven by genetic factors, which suggests that marketing campaigns that target entire families could be effective for promoting eco-friendly products and pro-environmental behaviors.

5- When a Green Product Backfires: Examining How Consumers View Negative Side Effects of CSR Initiatives

Reetika Gupta, Associate Professor of Marketing, Lehigh University, 621 Taylor Street, Bethlehem, PA, 18015, United States of America, reg205@lehigh.edu, Nevena Koukova

Some recent marketplace activity has demonstrated that CSR efforts by companies are sometimes accompanied with adverse side effects (e.g., Sunchips new green packaging is also noisy). In our research, we examine whether such adverse side effects influence the reactions to the CSR initiative and the brand in general. We propose that consumers' beliefs about the synergy between the resources a firm devotes to their ethical and functional attributes (Gupta and Sen, 2013) explain the impact of adverse side effects of CSR initiatives. Some consumers believe that there is a positive synergy between ethical and functional attributes construing the ethical attribute as a signal of the superiority/quality of the other, functional attributes of the product. As a result, consumers with positive synergy beliefs view the adverse side effect (e.g., noisy packaging) as a further confirmation of product quality preferring a product displaying negative CSR side effects to one that does not. However, consumers with negative synergy beliefs believe that investment in ethical attributes detracts resources from investment in other functional attributes. As such, due to their lack of sensitivity to CSR activities, they will be unfavorable to products that practice CSR in general: whether they display adverse side effects or not. In this research, we examine how differences in consumers' synergy beliefs drive consumers' reactions to negative CSR side effects. We also aim to outline boundary conditions for the demonstrated effects. From a managerial standpoint, our research offers insights into potential strategies marketers can use to benefit from their CSR activities.

■ SA09

09- Mimosa

Assortment

Contributed Session

Chair: Arjen van Lin, PhD Student, Tilburg University, P.O. Box 90153, Tilburg, 5000LE, Netherlands, A.I.J.G.vanLin@uvt.nl

1 - The Effects of Assortment Organization on Consumers' Decision Making: A Fluency Account

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Retail space and assortment organization is an important issue for retailers, and brand managers. The current work seeks to understand the impact of various assortment organizations on consumers' perception, evaluation and inferences. To study the impact of various assortment organizations, we explore how spatial organization impacts consumers' attention allocation and information-search pattern. Building on recent literature on attention, we argue that both attention allocation and information search pattern can predict the brand that consumers are likely to 'choose'. We also investigate how satisfied consumers will be with the shopping experience given the search strategies they used. The current study takes a fluency theory account to explain the effects of assortment organization in retailing. We argue that the impact of retail assortment organization on consumers' fluency experiences in information search and decision-making, impact choice. Two eye-tracking experiments explored the links between assortment organization, fluency, product evaluation, and choice, as well as shopping experience (satisfaction). When the assortment organization was unfamiliar thus disfluent, individuals perceived the assortment as less favorable but conveyed higher trust in the product quality from this assortment. Both the favorability of the layout and the trust in product quality drove the likelihood to purchase from the assortment. Eye-tracking data revealed that attention allocation to various product feature information differed across assortment organizations, implying that participants strategically rely on different product information to make decisions. Both allocated attention and brand evaluation contributed to predicting the choice of the product and brand.

2 - A Tempting Assortment: The Effects of Assortment on Multicategory Purchase Incidence

Sungtak Hong, Doctoral Student, London Business School, Regent's Park, London, NW14SA, United Kingdom, shong.phd2010@london.edu, Kanishka Misra, Naufel Vilcassim

Product assortment planning is one of the strategic decisions that retailers face. Often, grocers need to determine jointly the assortment for a group of categories in a particular space: the checkout aisle, end-of-aisle shelves, and freezer space to list a few. Although previous studies of a single product category have shown that consumers' purchase decisions are influenced by various aspects of product assortment, there is little known about how the product assortment of one category affects a consumer's decisions in other categories. While there have been studies of consumers' multicategory purchase decisions, the focus of such studies has been the effects of price and promotions. The goal of this research is to understand the cross-category impact of product assortments on consumers' category purchase incidence decisions. In our empirical analysis, we apply the multivariate probit model with a hierarchical structure to two frozen food categories–frozen meals and ice cream. The model makes use of comprehensive data sets from both household panel scanner and store-level sales, and we operationalize entropy of assortment as a proxy for consumers' perceived assortment variety. We find that households perceive the two categories independently with regard to price or promotion effects, yet their category purchase decisions are affected by the assortment variety of both categories: positively by own assortment variety, whereas negatively by cross assortment variety. The finding is complemented by an online experiment testing the category display proximity as a potential trigger of the effects.

3 - Retail Market Basket Analysis using Multi-Criteria Decision Techniques: A Case Study

Douglas MacLachlan, Professor Emeritus, University of Washington, Foster School of Business, Box 353226, Seattle, WA, 98195, United States of America, macl@uw.edu, Reza Sheikh, Afshin Mirzaei

With advancements in information technology, retail companies have accumulated huge amounts of data that are relatively untapped. Decisions about product assortment and shelf space allocation have a significant effect on customers' purchasing decisions and can provide retailers with a competitive edge. An approach using TOPSIS–a multi-criteria decision making (MCDM) method–is employed to analyze data obtained from a supermarket chain store over a period of 4 months in 2011. Shortly after implementing profitable baskets suggested by the algorithm, the result was improvement in daily transactions providing a 14.7 percent increase in the company's sales index.

4 - Hello Jumbo! The Spatio-Temporal Roll-Out and Consumer Adoption of a New Banner

Arjen van Lin, PhD Student, Tilburg University, P.O. Box 90153, Tilburg, 5000LE, Netherlands, A.I.J.G.vanLin@uvt.nl, Els Gijsbrechts

This paper explores the dynamics of consumer reactions to the national roll-out of a new banner after a large-scale acquisition. In particular, the authors study how the phase-out and gradual replacement of the old banner across local markets, affects consumers' store choice process. The proposed model links adoption of the new banner to (i) the (management) support of the old banner's stores prior to conversion and (ii) consumer learning about the new banner. Such learning may occur prior to the opening of a local store (through advertising and network effects) as well as after the opening (through actual visits). The model also corrects for endogeneity in both the sequence of entry by the retailer and its advertising spending. In the empirical application, the authors use the setting of the national roll-out of a new EDLP player, after its acquisition of a leading Hi-Lo chain. The refit program took two years, and store openings were supported by television and POP advertising under the theme 'Hello Jumbo!'– increasing brand awareness of the new banner and informing consumers about the change. In two counterfactuals, the authors examine how alternative entry strategies, and ongoing support for the old banner, impact consumer adoption of the new banner, thereby providing guidelines for retailers in selecting a successful roll-out strategy.

■ SA10

10-Asuka

Sales Force Motivation

Contributed Session

Chair: Tanjim Hossain, University of Toronto, 105 St George Street, Toronto, ON, M5S3E6, Canada, tanjim.hossain@utoronto.ca

1 - Sales Contests: How 'Sour Grape' Prize Structures Enhance Salesperson Effort and Performance

Jeffrey Boichuk, Doctoral Student, University of Houston, 334 Melcher Hall, Houston, TX, 77004, United States of America, jpboichuk@uh.edu, Niladri Syam, Michael Ahearne, James Hess

We study the optimal design of sales contests when applied to sales forces of asymmetric endowments. The practical problem we tackle is that sales forces are often composed of stars, core performers, and laggards, with stars often taking home the top prizes. What type of prize structure, then, may enhance the motivation of underdogs who are unlikely to win the top prize? We show that the theoretical and empirical findings pertaining to sales contests utilizing monetary prize structures do not necessarily transfer to those offering non-monetary prize structures. Our central premise is that conditions exist wherein rank-ordered prizes are optimal when applied to sales contests that offer non-monetary prizes. Through laboratory and field experiments, we compare monetary prize structures with those that offer multi-attribute, non-monetary prizes. Both our game-theoretic analytical model and our results demonstrate that prize structures offering multiple winners, rank-ordered prizes, and a consolation prize that dominates the top prize on some attribute, induce the greatest amounts of effort and performance. We refer to these prize structures as 'sour grape' prize structures. Recall Aesop's fable, The Fox and the Grapes. After trying as hard as he could to reach the grapes, the fox trotted away and said, 'Oh, you aren't even ripe yet! I don't need any sour grapes.' It was the subjective nature of the grapes that allowed him to downgrade the importance of attaining them. In a sales setting, such prizes allow salespeople to prefer what is available to what is not, and we find that core performers and laggard salespeople are more motivated in this situation than they are when cash prizes are offered.

2 - When the Wheat Lies among the Chaff – Salesperson's Luxury Brand Effort in a Multi-Branded Environment

Moumita Das, PhD Student, HEC Paris, 1 Rue de La Liberation, Jouy En Josas, 78350, France, moumita.das@hec.edu

Recent studies have shown that brand identification can increase the salesperson's effort towards the brand. However, the literature is silent about multiple brand identifications that multiple brands at a store may elicit. And, while research on assortment documents its impact on consumer and store level outcomes, little has been explored on how multiple brands within an assortment affect salespeople's effort allocation. The author proposes that brand status differences within the assortment influence the direction of salespeople's effort allocation amongst high and low status brands. Drawing from a vast literature on social identity theory and perceived fit, the author introduces a model that captures the salesperson's effort allocation in a multi-branded selling environment using salesperson and store manager matched data. Keywords: brand identification, assortment, luxury brands, status differences, perceived fit, salesperson effort allocation, salesperson performance.

3 - The Role of Fairness in Sales Organizations

Vincent Onyemah, Associate Professor, Babson College, 231 Forest Street, Malloy Hall, Babson Park, MA, 02457, United States of America, vonyemah@babson.edu, Dawn Iacobucci, Barton Weitz, Dominique Rouzies

This study examines the impact of sales force controls (e.g., managerial, procedural, outcome, behavioural, bureaucratic) on salesperson satisfaction, fairness perception and sales performance. In an analysis of 2,742 salespeople in more than 20 countries, we show that salespeople's perception of fairness is driven by several control elements but does not influence sales performance. Theoretical explanations for the findings and suggestions for future research are proposed.

4 - President's Club or Wall of Fame and Shame? Extrinsic and Intrinsic Motivations in Contest Design

Tanjim Hossain, University of Toronto, 105 St. George Street, Toronto, ON, M5S3E6, Canada, tanjim.hossain@utoronto.ca, Mengze Shi, Robert Waiser

This paper studies the interaction between monetary incentive structure and recognition scheme in contests. In designing a contest, a firm manages the incentive structure through the spread of rewards offered to consecutive ranks. The firm also chooses a recognition scheme: whether to publically announce all winners as a group ('President's Club'), announce the complete ranking ('Wall of Fame and Shame'), or not to make any public announcement. Results from our laboratory experiments show that the choice of recognition schemes affected effort decisions. Moreover, there were significant interaction between monetary incentive structures and recognition schemes in effort decisions; for example, on average, 'President's Club' induced substantially more efforts than 'Wall of Fame and Shame' under a low reward spread, but not under a high reward spread. These results underscore the importance of jointly deciding incentive structure and recognition scheme in theoretical modeling as well as in managerial decisions.

■ SA11

11- EMBA 2

Dynamic Econometric Models

Contributed Session

Chair: Florian Stahl, University of Zurich, Plattenstrasse 14, Department of Business Administration, Zurich, 8032, Switzerland, florian.stahl@business.uzh.ch

1 - Applying SUR (Seemingly Unrelated Regressions) and Dimension Reduction Methods in Market Mix Models

Ekaterina Trutneva, Business Intelligence Group, Bld. 1, 11 Ordzhonikidze Str., Moscow, 115419, Russian Federation, ekaterina.trutneva@bigdecision.ru, Ekaterina Atanasyan

The method shows actionable approach to overcome the key issues of the marketing processes–multicollinearity in factors and the ambiguity of causal relationship between analyzed variables (endogenity concerns). Among many methods, targeted at endogenity and multicollinearity consequences adjustment, there were selected the ones which provide the robust results in situation when length of time series data is no longer than 24 months. The paper is based on the marketing and business information available for Russian researches on the example of the digital company business case. We provide the detailed overview of the dimension reduction methods for multicollinearity issues and simultaneous equations approach as the ones of the most effective to overcome endogenity. These methods are perceived not just as the proper ones for robust modeling, but also as the easy to implement and integrate in the real business process. In the article there is described the background of these issues in Russian and worldwide practice. The one of the key values of the model was its integration in the company annual strategic planning routine. The paper contains the overview of the recognized sources describing underlined problems and alternative ways for its solution including Schmalensee, Sethuraman, Tellis, Fransens, Pauwels, Hanssens, Bagwel, Lambin and others. Current situation in Russia with data supply for the advanced statistical business is also described: which data sources are available for the researchers, how usually such projects are carried out and how management of the process influences the method selection and the data availability.

2 - Data Fusion over Multiple Time Periods to Develop Pseudo Longitudinal Data

Catherine Frethey-Bentham, Senior Lecturer, The University of Auckland, Private Bag 92019, Auckland, 1142, New Zealand, c.bentham@auckland.ac.nz

Cross-sectional data are much more common that longitudinal data for studies in marketing. However, longitudinal data often yields richer consumer insights. The purpose of this study is to develop a multiple imputation methodology capable of "morphing" repeated cross-sectional surveys into pseudo longitudinal data. The method is tested using Nielsen's "Panel Views" Survey, which allows for checks on the validation of the matching exercise. Traditional distance hot deck procedures were utilised to match individuals from separate data files using the nearest neighbor method. Since matching variables were measured on both interval and nominal scales, the distance between matched units was calculated using 1-Gower's similarity measure. Units were matched within age cohorts, which were defined because of the theoretical relationship between age groups and consumer behavior. A number of simulations were then conducted to test the method under different conditions. Several conditions obligatory for the use of data fusion to create pseudo longitudinal data are discussed and four conditions required to achieve a successful fusion over multiple time periods are derived. In particular, this research acknowledges the significance of time invariant relationships when fusing data files across different time periods, the importance of the relationship between matching and specific variables (i.e., those variables the analyst wishes to track over time), and the choice of recipient and donor data files - which is not as straightforward as with traditional data fusion since such data distributions can change over multiple time periods.

3 - Understanding Common Trends in Sustainability Strategy: A Binary Data Dynamic Factor Analysis Model

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Sustainability refers to an approach that creates long-term shareholder value that derives from economic, environmental, and social developments. Firms can pursue sustainability in three ways: First is to improve on "good" sustainability activities such as developing clean energy; second is to diminish "bad" sustainability activities such as reducing hazardous wastes; and third is to use a combination of the two strategies. Firms switch among these three sustainability strategies over time to cope with social pressures and new regulations. In addition, some sustainability activities have been considered more "important" than other activities. In environmental development, for example, pollution prevention has been widely implemented by firms while using recycled material has not been popular. However, sparse academic research investigates these phenomena. To address this critical issue, we seek to answer two research questions: How does the structure of firm's sustainability strategy evolve over time? And which sustainability activity is important for each of three sustainability dimensions? We analyze KLD STATS data which are binary longitudinal data for "good" and "bad" sustainability activities. We model firms' sustainability activities using a binary dynamic factor analysis (DFA) where underlying structures can be identified by unobserved factors and the importance can be inferred by factor loading. To the best of our knowledge, there is no dynamic factor model that can deal with multivariate binary format data such as the KLD STATS data, which is our methodological contribution.

4 - The Impact of Recalls on Customer Acquisition and Customer Retention in the Automobile Industry

Florian Stahl, Assistant Professor, University of Zurich, Plattenstrasse 14, Zürich, 8032, Switzerland, florian.stahl@uzh.ch, Lucas Beck, Mark Heitmann

The number of product recalls increased dramatically in the last years and become a relevant research topic. In this paper, we analyze the impact of recalls on customer acquisition and customer retention in the automobile industry. Our empirical analysis bases on a sample that consists of 13,800 automobile safety recalls issued in the U.S. and actual purchase data of more than 700 car models in 44 different automobile brands sold between 1999 and 2008. We derive customer acquisition and customer retention rates from first-order Markov car model-switching matrices. Our results indicate safety recalls have only a significant negative impact on customer acquisition but not on customer retention. This implies that customers of an affected car model and drivers of another brand perceive safety recalls in different way.

■ SA12

12- Geneve

Empirical Generalizations

Contributed Session

Chair: Blake McShane, Northwestern University, Kellogg School of Management, 2001 Sheridan Road, Evanston, IL, 60208, United States of America, b-mcshane@kellogg.northwestern.edu

1 - A Model of Mature Market Growth and Decline

Steven Shugan, McKethan-Matherly Eminent Scholar Chair, University of Florida, 2030 NW 24th Avenue, Gainesville, FL, 32605, United States of America, sms@ufl.edu, Debanjan (Deb) Mitra

Market growth is fundamental to marketing. Frank Bass' s seminal theory explains the growth of new product markets. This paper develops an analogous theory for the growth of mature markets, which potentially explains growth consisting of intermittent rises, declines or stagnation. Our theory suggests that successful and unsuccessful experimentation, in every period, causes numerous changes among market participants. The environment sorts through those changes determining winners and losers. Growth requires a sufficient number of large changes that cause displacement in market positions, as different market participants become winners and losers. So one non-obvious falsifiable implication of our theory is that displacement precedes growth and stability precedes decline. We test our theory's predictions (hypotheses) using multiple publicly available datasets, making our tests easily replicated. We highlight the results for two datasets (sales for top 100 firms for 55 years and all automobile models for 25 years). Neither trends nor lagged growth can explain future growth. Even the entry of new products is unable to explain growth. However, our theory of environmental sorting explains market growth and decline in very different contexts without the need for exogenous context-specific explanations and factors. All of our quantitative predictions (both short-term and long-term) are statistically significant.

2 - Exploring the Empirical Bias in Digital Marketing Research

Morana Fuduric, Faculty of Economics and Business - Zagreb, Trg. J.F. Kennedyja 6, Zagreb, Croatia, morana.fuduric@gmail.com, Ana Javornik, Andreina Mandelli

Numerous concerns have been expressed about the decline of conceptual papers (Yadav, 2010). Such observations consequently call for a more detailed analysis that would investigate the underlying reasoning related to these patterns, such as exploring the link between the empirical bias, the accompanying decline of conceptual papers and reviewing-related changes in journals (MacInnis, 2005). This paper examines the issue of empirical bias and related questions with a special focus on digital marketing as one of the increasingly important domains in marketing (Kaplan and Haenlein, 2010). Firstly, we discuss a framework for exploring and understanding empirical bias in digital marketing research. In particular, this paper aims at examining differences in ratio between published conceptual and empirical digital marketing papers. We adopt the research design used by Yadav (2010) to assess the changing patterns pertaining to these two categories of articles in highly-ranked marketing journals (namely JM, JMR, JCR, MKS, JAMS), with the addition of two journals (JIM, JCMC) that specifically investigate digital contexts. The year 1996 is defined for the study's cutoff, as the year one of the initial digital marketing conceptualizations was proposed (Hoffman and Novak, 1996). Secondly, content analysis is applied to examine 16 years of publications and to differentiate between conceptual digital papers, conceptual non-digital papers, empirical digital papers and empirical non-digital papers (Darden, 1991; Yadav, 2010). Thirdly, we explore in more detail the substantive foci of conceptual and empirical digital marketing papers. Finally, as the preliminary findings indicate the salience of empirical research, the implications for the field of digital marketing are discussed.

3 - Meta-MANOVA with Application to Choice Overload

Blake McShane, Northwestern University, Kellogg School of Management, 2001 Sheridan Road, Evanston, IL, 60208, United States of America, b-mcshane@kellogg.northwestern.edu, Ulf Bockenholt

In this paper, we introduce methodology that allows for meta-analysis of multi-factor experiments that follow a wide variety of experimental designs. Building on the REML mixed model, our methodology accommodates (i) an arbitrary number of moderators each with an arbitrary number of levels, (ii) an arbitrary number of dependent variables, (iii) between subjects and various degrees of within subjects designs, and (iv) very general dependence structures for the observations and random effects. Further, each experiment in the meta-analysis can have a different experimental design and, indeed, it is possible to use our methodology to conduct a meta-analysis even when no 'complete data' experiments are available. Finally, we present our meta-analytic results in a novel ANOVA-like format that aids interpretability. We apply our novel methodology to forty-six experiments from seventeen recent papers that study the effect of choice overload on seven different dependent variables utilizing up to four different moderators of the effect and find, across a wide variety of dependent variables and moderators, an effect that is both strong and moderated.

■ SA13

13- Luzern

Finance and Marketing V: Communication

Contributed Session

Chair: Don O'Sullivan, Melbourne Business School, 200 Leicester Street, Melbourne, VIC 3054, Australia, d.osullivan@mbs.edu

1 - Media Mix Decisions and Firm Value

Pablo J. Lopez-Tenorio, Director of Master in Marketing Science, ESIC Business & Marketing School, Avda. Valdenigrales S/N, Pozuelo de Alarcon, 28223, Spain, pablojose.lopez@esic.edu, Jaime Romero

Marketers are growingly required to demonstrate the financial impact of their decisions actions before senior management, financial executives and shareholders. Previous research has shown that advertising spending increase the magnitude of firm value and its stability across time. These findings are very important for the marketing field. However, we ignore which specific advertising decisions are more adequate to increase firm value. In this research we aim to partially fill this gap by analyzing the impact of budget allocation among competing media on company market value.To fulfill our objective we analyze the firm value and advertising expenditures in three different media (television, radio and printed media) of 84 companies during a period of 5 years. Particularly we employ vector autoregressive models in which company value and advertising spending are the endogenous variables. We analyze data at a monthly level. Our preliminary results suggest that the influence of each media on firm value is different. Particularly, we have found that television spending has a stronger effect on company value than printed media spending. Similarly, printed media are more appropriate to grow company value than radio advertising spending. These results have both theoretical and managerial implications. From a theoretical perspective we contribute to clarify how media mix decisions can increase shareholder value. For advertising managers these insights could be helpful to extract a higher return from their media plans, thus improving the efficiency of their decisions. Second author funded by Fundacion RamÛn Areces and by Plan Nacional I+D+I - Ministerio de Econom'a y Competitividad (project ECO2012-31517). Advertising dataset provided by Arce Media S.A.

2 - The Roles of Advertising and Marketing Capability in Influencing the Financial Impact of News

Guiyang Xiong, Assistant Professor, University of Georgia, 148 Brooks Hall, Terry College of Business, Athens, GA, 30606, United States of America, gyxiong@uga.edu, Sundar Bharadwaj

News reports that carry positive or negative sentiment about a firm influence the firm's stock price performance. This study examines the role of firm controllable marketing factors, namely, advertising spending and marketing capability, in moderating the relationship between news stories and firm stock returns. Drawing on a large panel data sample of over 7000 firm-month observations, the results indicate that the moderating roles of the two marketing factors are complementary: while advertising reinforces the positive impact of positive news on abnormal stock returns, marketing capability mitigates the negative impact of negative news reports. Additional analyses are conducted to explore the underlying mechanisms via which these moderating effects occur. We find that, whereas the moderating effect of marketing capability is attributable to its influence on the level and volatility of future cash flows, advertising moderates the effect of news by impacting investors' attention and response to the news. The econometric analysis accounts for the potential endogeneity between news reports, stock returns, and marketing variables. The results are also robust to alternative measures and analysis approaches.

3 - Selling Losers and Keeping Winners: How Goal Dynamics Predict a Reversal of the Disposition Effect

Arvid Hoffmann, Assistant Professor of Finance, Maastricht University - SBE, Department of Finance, Tongersestraat 53, Maastricht, 6211 LM, Netherlands, a.hoffmann@maastrichtuniversity.nl, Jaakko Aspara

A well-documented behavioral pattern guiding consumers' investment choices is the disposition effect, which refers to the tendency to sell winning investments too early, while holding on to losing investments too long. This bias has negative wealth consequences, as typically, consumers' losing investments continue to underperform while their winning investments continue to outperform. Using a goal-systemic framework, the present research identifies boundaries for the disposition effect by predicting the specific conditions under which consumers' susceptibility to this effect is reversed. Experimental results indicate that such conditions include situations when: (1) a superordinate (savings) goal is activated by a subtle prime, (2) overall progress towards a (savings) goal is negative, (3) investment opportunities have the capacity to serve alternative goals, such as self-expression, besides the maximization of financial returns, and (4) a superordinate savings goal with a clear end-state looms close.

4 - CEO Stock Options CMO Power and Marketing Expenditure

Don O'Sullivan, Melbourne Business School, 200 Leicester Street, Melbourne, VIC 3054, Australia, d.osullivan@mbs.edu, Geoff Martin

Recent studies have examined the relationship between Chief Executive Officer (CEO) equity incentives–stock options and stock ownership–and marketing. Separately, studies have investigated the role and influence of the Chief Marketing Officer (CMO) within firms. Integrating these two research streams we examine the interplay between CEO equity incentives and CMO power in influencing marketing expenditure. Our study has two goals: first, to propose and test a theoretical relationship between CEO stock option wealth–an important component of CEO incentives–and marketing expenditure; scond, to examine how CMO power moderates the relationship between different types of CEO stock option wealth and marketing expenditure. Specifically, we theorize that marketing expenditure is a positive function of both CEO stock option wealth and the future prospective wealth associated with CEO stock options. We also theorize that the impact of CEO stock option wealth on marketing expenditure is positively moderated by CMO power. In contrast, we argue that CMO power mitigates the impact that the future prospective wealth inherent in CEO stock options has on marketing expenditure. Drawing on data from ExecuComp and Compustat, we test our expectations is a study of publicly traded firms between 1996 and 2011. Our findings have implications for the marketing strategy and marketing-finance literatures, for practicing marketers, senior executives and boards of directors.

■ SA14

14- Zurich

Consideration Sets and Segmentation

Contributed Session

Chair: Michel van de Velden, Erasmus University, P.O.Box 1738, 3000 DR, Rotterdam, Netherlands, vandevelden@ese.eur.nl

1 - Age-Related Models of Loyalty in Radio Listening: Station Recency and Listening Duration

Gilles Laurent, Professor, INSEEC Business Schools, 27 Avenue Claude Vellefaux, Paris, 75010, France, glaurent@groupeinseec.com, Raphaille Lambert-Pandraud

Older consumers, an important economic target, have been shown be more brand loyal for products and services. In this paper, we model several facets of loyalty to radio stations. Older consumers listen to fewer and older stations; when listening to a station, the duration of the listening episode is longer. We analyze a French 2007 audience panel data, which tracks consumers' listening behaviour over three consecutive weeks. We first model whether they listen to long-established vs. recent stations: following a political change in 1981, radio stopped being a

government monopoly and many new stations were introduced. A binomial model analyzes, among the stations that a consumer listens to, whether they are old or recent. We show that age impacts positively the probability of choosing an old station. Second, we model the number of stations a consumer listens to. A Poisson model shows that older consumers listen to fewer stations. Third, separate Poisson models of the number of old stations and of the number of recent stations reveals opposite effects of age. Fourth, we model the duration of the first listening episode by a consumer on each day, which is measured discretely (in quarters of an hour). A beta-binomial model with spikes evidences that older consumers have longer listening episodes. These four analyses allow us to contrast behavioral profiles of radio listeners across age groups.

2 - Forecasting Substitution Patterns when Consumers Diversify Their Consideration Sets

Michael Palazzolo, University of Michigan, Ross School of Business, Ann Arbor, MI, 48104, United States of America, palazzom@umich.edu, Fred Feinberg

When firms offer multiple products (e.g., automobiles), decisions about product line changes require accurate forecasts of how consumers substitute between products inside and outside the line. We develop a new framework for forecasting such substitution patterns, using stated consideration set data for the automotive market. A common assumption in consideration set models applied to multi-product markets (e.g., van Nierop et al. 2010,) is that changes to (the first-stage utility) of any one alternative would leave the first-stage utility (and consideration probability) for any other unchanged. Our framework allows for modeling explicit interdependence among the utilities of multiple alternatives, yet avoids the curse of dimensionality. We use our framework to model diversification in consideration sets: when consumers include alternatives with different values of an attribute (e.g., different manufacturers) in their consideration set to maximize the expected value of their final choice. We show that diversification should occur if (1) the utility of an attribute is at least partially unobservable to the consumer, and (2) the unobserved portion of utility is positively correlated across alternatives sharing a value for that attribute (e.g., all vehicles made by a given manufacturer). If consumers diversify their consideration sets, standard approaches (that ignore utility interdependence) tend to overestimate the impact of product line changes by ignoring (1) the 'shielding' effect of within-firm substitution after product removals or declines, and (2) the cannibalization that occurs when new products are offered or existing products are enhanced.

3 - Explaining Environmental Consciousness at the Individual and Cross-National Level: A Meta-Analysis

Meike Morren, VU University Amsterdam, De Boelelaan 1105, Amsterdam, 1081 HV, Netherlands, meike.morren@vu.nl

Environmental consciousness is becoming increasingly important in society and companies need to respond to consumers' needs in this area. However, consumers within and across countries differ in the extent to which they want to play an active or passive role in protecting the environment. Many studies attempt to profile these green consumers based on socio-demographic or psychographic variables. Cultural differences between countries are explained by the country's wealth, the composition of the population and the environmental quality. Some studies find that people in wealthy nations are more willing to pay for environment (Franzen & Meyer, 2010) whereas other studies find that environmental concern is lower in wealthy nations than in poorer nations (Brechnin & Kempton, 1994; Dunlap & Mertig, 1997). Within countries, some find that environmental concern negatively relates to income (Roberts, 1996) while others find a positive relation to education (Diamantopoulos, Schlegelmilch, Sinkovics, & Bohlen, 2003). The great variation among results may be due to diverse and inconsistent methods that are used in these studies including the sampling approach and the operationalization of environmental consciousness. Further, as the methods used are based on different assumptions about the data, they likely import different biases in the results. This is the first meta-analysis in marketing that aims to shed light on the potential methodological explanations at the core of the differences found in the relationships between nation's wealth, composition of the population and environmental consciousness.

4 - Online Profiling and Clustering of Facebook Users

Michel van de Velden, Erasmus University, P.O.Box 1738, 3000 DR, Rotterdam, Netherlands, vandevelden@ese.eur.nl, Jan-Willem van Dam

In a relatively short period of time, social media have acquired a prominent role in media and daily life. Although this development brought about several academic endeavors, literature concerning the analysis of social media data to investigate one's customers base appears to be limited. In this paper, we show how data from the social network site Facebook can be operationalized to gain insight into the individuals connected to a company's Facebook site. In particular, we propose a data collection framework to obtain individual specic data and propose methodology to explore user proles and identify segments based on these proles. We illustrate our methodology by applying it to the Facebook page of an internationally well-known professional football (soccer) club. In our analysis, we identify four clusters of users that differ with respect to their indicated "liking" proles.

Saturday, 10:30am - 12:00pm

■ SB01

01- Montreux

Impact of Social Media Investments

Cluster: Internet and Interactive Marketing

Invited Session

Chair: Kalyan Raman, Professor, Northwestern University, 1870 Campus Dr., Evanston, IL, 60208, United States of America, kalyraman@gmail.com

1 - Effects of Social Media Interactions on Consumer Mind-Set Metrics and Sales

Lisette de Vries, University of Groningen, Nettelbosje 2, Groningen, Netherlands, l.de.vries@rug.nl, Sonja Gensler, Peter S.H. Leeflang

At social media, consumers can interact with firms by, for example, becoming fans at a brand's Facebook page and by liking, sharing, and commenting on content posted by the firm. Firms thus provide a platform for interactions (i.e., firm-facilitated interactions). Consumers can further interact with each other about brands by using (micro)blogs or recommendation sites (i.e., non-firm-facilitated interactions). Although both types of social media interactions are proliferating, little is known on the effects of both interactions on firm outcomes. We contribute to the literature by providing insights into the dynamic and reciprocal relations between firm- and non-firm-facilitated social media interactions, a firm's media expenditures, consumer mind-set metrics, and sales. In an empirical study, we show that both firm- and non-firm-facilitated social media interactions do influence mind-set metrics and sales. To study these effects we use a VARX model. From forecast error variance decompositions we infer that social media interactions explain a substantial part of mind-set metrics and sales; for awareness the interactions explain about 5%, for preference approximately 12%, and for sales about 10%. By using impulse response analyses, we observe that firm-facilitated social media interactions influence awareness positively, which is a leading indicator for sales. Moreover, non-firm-facilitated social media interactions influence consumers' preference for the firm's brand and additionally directly affect sales. All effects only exist in the short-term.

2 - Social Media and Advertising Interaction Effects

Lai Jiang, Assistant Professor, University of British Columbia, Sauder School of Business, 2053 Main Mall, Vancouver, BC, Canada, lai.jiang@sauder.ubc.ca, Bryan Bollinger, Michael Cohen

This paper explicitly models the effectiveness of social media exposures and their interaction with banner and television advertising in driving consumer purchases. We allow for interactions across marketing forms in both the creation of form-specific goodwill as well interactions in these goodwills in contributing to consumer utility. Our model allows goodwill from traditional forms of advertising to decay at different rates than goodwill created through social media exposures, possibly due to differences in the emotional connections consumers form with brands as a result of the different marketing channels. Our single source data allows us to assess both the short-term and long-term marginal contributions of social media and advertising on sales.

3 - The Effect of Social Media Marketing Communication on Customer Behavior: An Empirical Investigation

Ramkumar Janakiraman, Texas A&M University, 220 Wehner, 4112 TAMU, College Station, TX, 77843, United States of America, ram@mays.tamu.edu, Rishika Rishika, Ram Bezawada, Ashish Kumar

Extant studies in the area of digital marketing have primarily focused on user generated content and its effect on various performance metrics. However, there is no study to our knowledge that has examined the effects of firm generated content in social media on customer behavior at the individual customer level. The primary objective of this study is to fill this critical gap by examining the effects of firm generated content in social media on customer behavior. Leveraging a unique data in which we complement the detailed activities in a firm's social media page with individual customer level transaction data, we model the effect of content created by the focal firm in its social media page on key customer behaviors. We also examine for the interplay between firm generated content and marketing communication in other forms of media. We estimate our proposed model of customer behavior using hierarchical Bayesian methods. We address endogeneity issues that are typical to social media using appropriate econometric techniques. Based on our results, we conduct a number of simulations which we use to offer prescriptions to managers on how to leverage social media to engage with their customers and to improve returns accruing to social media expenditures.

4 - Dynamic Interaction of Social Media and Marketing Communications

Kalyan Raman, Professor, Northwestern University, 1870 Campus Dr, Evanston, IL, 60208, United States of America, kalyraman@gmail.com, Vijay Viswanathan

Social media increasingly dominate the lives of consumers, but little is known about how they interact with the firm's marketing communications efforts over time and how this interaction translates into market performance. We propose and empirically validate a dynamic model that links sales to the interaction between social media and the firm's communications spending level. Both advertising and social media may enhance sales but there are costs associated with both these activities. Studies show that social media may not always have a beneficial impact on sales. This raises the question–is there an optimal investment level for social media just as there is for advertising? We use our model to figure out the dynamically optimal profit-maximizing levels for advertising and social media. We present theoretical results showing how the optimal levels of advertising and social media change as the firm's environment changes.

■ SB02

02- Lausanne

Modeling Online Behaviors to Improve Performance

Cluster: Internet and Interactive Marketing

Invited Session

Chair: Rakesh Niraj, Associate Professor, Case Western Reserve University, 10900 Euclid Avenue, PBL 222, Cleveland, OH, 44106, United States of America, rkn10@case.edu

1 - Mathematical Theory for Hit Phenomena as Marketing Science

Akira Ishii, Professor, Tottori University, Koyamacho-minami 4-101, Tottori, Japan, ishii@damp.tottori-u.ac.jp, Hidehiko Koguchi, Koki Uchiyama

For marketing today, we can able to observe the response of consumers using internet like weblog, Facebook, Twitter etc. Mathematical theory for hit phenomena[1] is the theory to model response of consumers in societies using statistical physics and it can be applied successfully to daily incomes of box business, online music, renta car business an many other consumer goods. The key element of elements of the theory is the daily advertisement, direct communication (communication with friends) and indirect communication (rumor). Output of the theory is the daily purchase intention of consumers. The calculated daily purchase intention can be compared with the observed daily number of postings on twitter and blogs. Using this theory, we can analyse Return on Investment (ROI) for advertisement. From the real data on social media, we can analyse the strength of advertisement effects for TV, newspaper, net-news sites and Facebook separately. Therefore, the mathematical theory for hit phenomena can be a powerful marketing tool to analyse the advertisement effect in the market. Since the theory is very general, it can be applied to any countries having internet. The data of posting as blog or twitter is observed using Hottolink service and the TV advertisement data is obtained from M Data. [1] A.Ishii, H.Arakaki, N.Matsuda, S.Umemura, T.Urushidani, N.Yamagata and N.Yoshida, New Journal of Physics 14 (2012) 063018(22pp), "The 'hit' phenomenon: a mathematical model of human dynamics interctions as a stochastic process." Previous studies for box office in marketing science is referred in ref.1.

2 - Incorporating Consumer Browse Data: Extended Item-Based Top-K Recommendation Algorithms

Xiaomeng Du, PhD Candidate, Peking University, Room 416, Building 4, Zhongguanxinyuan, Beijing, 100871, China, fancia814@gmail.com, Meng Su, Xiaoyu Zhou

Personalized recommendation systems are becoming increasingly popular in e-commerce. More and more firms rely on recommendation systems to drive their business. One of the most popular recommendation approaches is item-based recommendation algorithms, which recommend by finding products that are similar to other products using consumers' purchase data. However, purchase data do not contains complete information to reveal the real preference of consumers. The purpose of this paper is to extend the item-based top-k recommendation algorithms by incorporating consumers' browse data, which contains useful information in revealing the preference of consumers. First, by utilizing consumers' browse data, we extend the cosine-based method of modeling the similarity between two products and build four different models subjected to different conditions according to different browse and purchase combinations. Second, we test our extended algorithms on a simulated data set which includes 120 consumers' browse and purchase data on 120 products. Finally, we apply our extended algorithms to a real world data set which is provided by a global online B2C company. The data set includes the browse and purchase data of 11,936,932 consumers on 82,242 products during 5 months. Both results of the simulation data and the real data show that our extended algorithms significantly outperform the traditional item-based algorithms, in terms of hit rate (HR) and average reciprocal hit rank (ARHR). Specifically, our extended algorithms lift 35.023% sales compared to random algorithms and 7.846% compared to tradition item-based algorithms.

3 - Does Auction Design Affect Participation and Performance? Evidence from Crowd-Sourcing Platforms

Chong Wang, Assistant Professor, City University of Hong Kong, Dept. of IS, College of Business, Tat Chee Ave., Kowloon, Hong Kong - PRC, alex.wang@cityu.edu.hk, Yili (Kevin) Hong

Crowd-sourcing platforms enable firms to distribute tasks to talented workers all over the world. A significant amount of jobs are outsourced to freelancers using different auction mechanisms in these marketplaces. However, there is a dearth of empirical investigation about the effect of auction mechanism design on bidder participation and market performance. Using proprietary transaction data from one of the largest online crowd-sourcing platforms in the US, we empirically compare open bid buyer-determined reverse auctions and sealed bid buyer-determined reverse auctions. Guided by our theoretical discussion, a set of interesting observations emerge from the study. In general, compared to open-bid auctions, sealed-bid auctions attract more bids and have lower winning prices (cost for the buyers). However, it is less likely for seal-bid auctions to successfully result in a contract between the buyers and the winning bidders. We attribute the performance difference between the two mechanisms to the "screening effect" of open-bid auctions, which deters low quality providers from entering the auction and reduces selection error. We discuss the implications of our findings for auction mechanism design in crowd-sourcing platforms.

4 - Choosing the Right Tools for the Job to Boost Online and Offline Sales

Rakesh Niraj, Associate Professor, Case Western Reserve University, 10900 Euclid Avenue, PBL 222, Cleveland, OH, 44106, United States of America, rkn10@case.edu, Tanya Mark, Jan Bulla, Ingo Bulla

On one hand, consumer buying from multiple channels (e.g., Internet and retail store) is linked to an increase in the number of purchases and more profits (Ansari et al. 2008, Venkatesan et al. 2007). However, research also finds that multichannel enthusiasts are less brand-loyal than retail store customers (Konus et al. 2008) and long-term purchase incidence decreases with increase in Internet channel usage (Ansari et al. 2008). These contradictory findings point to the need for more research to disentangle the long-term effects of marketing activities and channel choice across channels on buying behaviour. One possible explanation to these counter-intuitive findings is that prior models in the channel choice literature ignored dynamics inherent in consumer buying behavior over long term. Ignoring dynamics might lead to erroneous parameter estimates when modeling consumer behavior (Fader and Hardie 2010). As such, we explicitly model these dynamics by extending the Poisson hurdle model to 1) allow for a multinomial decision in the first part of the model to account for channel choice, and 2) assess the impact of marketing promotions on a consumer's propensity to buy by introducing random coefficients driven by a hidden Markov chain. Using data from a multi-channel retailer over a nine-year period, we empirically validate our model. Our results indicate how accounting for dynamics changes the conclusions about which type of marketing activities are effective in promoting same-channel and cross-channel purchase behavior.

■ SB03

03- Bern

Emerging Markets in India

Cluster: Special Sessions

Invited Session

Chair: K. Sudhir, Yale University, 135 Prospect Street, P.O. Box 208200, New Haven, CT, United States of America, k.sudhir@yale.edu

1 - Analyzing the Performance of Brands in Fragmented Retail Markets of Emerging Economies

V. Kumar, Georgia State University, Room: Rm. 400, RCB Building, J. Mack Robinson College of Business, Atlanta, GA, United States of America, vk@gsu.edu, Denish Shah, Yi Zhao

In emerging markets, retail sales primarily occur through small, independently run retail stores with limited shelf space and resources. Consequently, not all products of popular brands are likely to be available in a typical small sized retail store. In such a scenario, one of the critical factors driving brand performance for manufacturers such as consumer packaged goods (CPG) firms in emerging markets is the extent to which its products (vis-‡-vis competitors') are available to consumers. However, this information is difficult to infer from aggregate market level datasets that are typically available to manufacturers for diagnosing their market level performance. In this research, we propose a novel methodology to enable marketers to infer the joint distribution of product assortment that a consumer is likely to encounter while making purchase decisions. We achieve this by employing only aggregate market level data that are typically available to managers. Upon application of the methodology with real world data from an emerging market country we find that the proposed approach not only outperforms conventional approaches from extant research but also enables managers to gain additional diagnostic insights with respect to the impact of retailer stocking (in addition to consumer preference) on brand performance.

2 - Transaction Costs and Technology Adoption in Emerging Markets

Ishani Tewari, Yale University, Yale School of Management, New Haven, CT, United States of America, ishani.tewari@yale.edu, K. Sudhir

This paper identifies transaction costs associated with branch banking which drive customers to adopt mobile banking. High travel times and poor service push bank customers towards the mobile platform. However, these costs are more likely to encourage mobile use for information-intensive rather than transaction-intensive tasks, suggesting that branch banking may offer higher quality for certain banking needs. Interestingly, less affluent households are disproportionately more likely avoid the branch in favor of the mobile due to poor service. This finding sheds light on how discrimination may be an important driver of self-service technology adoption, especially in emerging markets. For banks in these markets, the presence of very high transaction costs arising from institutions and culture create a large segment of potential customers eager to adopt new technologies.

3 - Paying for Intermediate Output: A Field Intervention

Xiaolin Li, University of Minnesota, Carlson School of Management, Minneapolis, MN, United States of America, lixx1012@umn.edu, Om Narasimhan, Ranjan Banerjee, George John

This paper studies the question of paying incentive compensation to employees who produce an intermediate output (like leads). We study a firm in a large emerging market that currently paid commissions to one group of employees (telecallers) for the intermediate output (leads) in addition to commissions paid to another group of employees (salespeople) for the final output (sales). We develop a hidden action model of this setting, which discloses that paying for intermediate output pivots on the strategic complementarity (versus substitutability) between the intermediate and final stages. For instance, if the salesperson's efforts increase when their telecaller generated leads decrease, then strategic substitutability holds, and commissions for leads is not warranted. We persuaded this firm to drop their commissions for the intermediate output, reasoning that lower induced effort would reduce the telecaller generated leads. Crucially, observing the knock-on effect on sales discloses whether the stages are strategically complementary or substitutable. Data on 15 individual telecallers and 29 matched salespeople over 19 pre- and 12 post-intervention months shows a 4% drop in leads, but a much smaller drop in sales, suggesting that strategic substitutability holds for this firm's sales funnel. We follow up with a structural econometric estimation of the key primitives and find that salesperson efforts increased 4.4% in response to the 18% drop in telecaller effort. This combination of an analytical model, a field intervention and structural econometrics provides converging evidence about the conditions under which paying incentives for intermediate output is warranted.

4 - The Impact of Offshoring New Product Development (NPD) to Emerging Markets on Shareholder Value

Venkatesh Shankar, Texas A & M University, College Station, TX, United States of America, venky@venkyshankar.com, Nicole Hanson

In recent years, there has been a fundamental shift in the innovation architecture (the portfolio and structure of innovations) of many global firms, such as Boeing, General Electric, Procter & Gamble, and Oracle. These firms are increasingly offshoring new product development (NPD) to emerging markets (led primarily by India and China) primarily because of the rapid economic growth in emerging markets, the severity of economic downturns in developed markets, and the emergence and growth of low-cost, highly trained workforce in emerging markets. However, not much is known about how effective such offshoring activities are. What are the short-term and long-term returns to shareholder value of offshoring NPD to emerging markets? We develop a conceptual framework and empirically investigate this important research question using an innovation dataset of 150 publicly traded North American-headquartered global companies who offshored some of their NPD activities to India. We propose that the source of resources (internal vs. external/acquired) behind innovation architecture determines the effect of NPD offshoring on firm value. We find that internally driven innovation architecture has a negative return on shareholder value, while externally driven innovation architecture has a positive return on shareholder value. Furthermore, we find that marketing capabilities and firm size moderate the direction and size of these effects. We anticipate the findings to have significant theoretical and managerial implications for planning and managing innovations in an increasingly interconnected world.

■ SB04

04- Monch

Game Theory: Product Quality and Innovation

Contributed Session

Chair: Subramanian Balachander, Professor, Purdue University, Krannert School of Management, 403 W. State Street, West Lafayette, IN, 47907, United States of America, sbalacha@purdue.edu

1 - Competitive Pre-Announcement in a Context of Bilateral Information Asymmetry

Sumitro Banerjee, Associate Professor and the Ferrero Chair in International Marketing, European School of Management and Technology, Schlossplatz 1, Berlin, 10178, Germany, sumitro.banerjee@esmt.org, David Soberman

We examine an incumbent firm's decision to pre-announce a new product before its launch in market where it is threatened by the entry of a superior product. While the entrant's product is superior, the buyers of the incumbent's product incur a switching cost if they buy the entrant's product and in addition the promised new product can match the entrant's product quality. We show that in markets where the incremental benefit of the entrant's and the incumbent's new product is relatively high, the incumbent pre-announces the new product when consumers have rational expectations about the future. Surprisingly, the higher the switching cost the lower is the likelihood of pre-announcement and higher the profit of the entrant under pre-announcement. Thereafter we examine the case of asymmetric information where the incumbent is unaware of the consumer switching cost and the entrant is unaware of actual benefit derived by the consumers from its product.

2 - Effects of Competitor's Referral on Product Quality and Consumer Welfare

Hongyan Shi, Assistant Professor, Nanyang Technological University, BLK S3 B1A-32, 50 Nanyang Ave, Singapore, Singapore, hyshi@ntu.edu.sg, Baojun Jiang

In this paper, we study a potential entrant's product quality and pricing decisions in a market where the entrant pays a referral fee to the incumbent to gain access to its customers. We examine how the incumbent's referral fee structure (e.g., revenue-sharing versus fixed per unit of sales) affects the entrant's product quality decision and consumer welfare. We show that the incumbent's referral fee decision critically depends on its knowledge of the entrant firm's technological efficiency in quality design. We specify the conditions under which pooling equilibrium exists such that the entrant chooses a quality level to conceal its cost efficiency in attempt to obtain a favorable referral fee. We also study the effect of the incumbent's acquisition of the potential entrant on product quality and consumer welfare.

3 - Game Theoretic Cost Allocation Model to Enhance Co-Operation

Pong Yuen Lam, Associate Director / Professor, Chinese University of Hong Kong, EMBA Program, No. 12, Chak Cheung Street, Shatin, N.T., Hong Kong - PRC, lampongyuen@cuhk.edu.hk, Yuho Chung

How can marketer allocate cost savings among multiple parties to maximize their likelihood of co-operation? For example, how can a franchisor convince franchisees to share national advertising cost? There are three minimum requirements. First, all parties should share the total cost. Second, the cost allocated to each party should be less than or equal to the original cost of the party without cooperation. Third, the model should allow some parties (but not all) to co-operate. Instead of directly applying the Shapley value by using absolute cost savings to derive cost allocation, we derive a more general solution for two parties by incorporating an argument on the use of absolute savings or percentage savings in the simplest case of two parties and generalize it to three or more parties. Shapley examines all permutations of all parties; different permutations may lead to different cost allocations for different parties. Getting all parties to agree with the 'permutation' concept is difficult in practice, because A and B may agree to co-operate and then AB negotiate with C. AB is a combination, not a permutation. To determine the cost allocation between two parties, we begin with the following general expression, where c1 is the cost for party 1 to act alone, c2 is the cost for party 2 to act alone, and c12 is the cost for parties 1 and 2 if they agree to co-operate. We can then derive that the cost allocation between two parties should be to divide the absolute amount of savings, (c1+c2–c12), equally if we want to maximize the joint probability of two parties to co-operate. Whether a cost allocation model will have practical use will depend on whether its assumptions are acceptable and understandable by practitioners, and whether it has theoretical support.

4 - Premium Offers with Product Purchase as a Signaling Device

Subramanian Balachander, Professor, Purdue University, Krannert School of Management, 403 W. State Street, West Lafayette, IN, 47907, United States of America, sbalacha@purdue.edu

A marketing manager has several sales promotion tools such as coupons, rebates and contests to choose from in preparing a sales promotion plan. One such sales promotion device is the offer of a free or subsidized gift or premium with purchase of a product. Casual empirical evidence suggests that brands tend to differ in the extent to which they employ premium offers as part of their promotion plans. While premium offers may have several objectives, in this paper, we explore the signaling implications of offering premiums or gifts with purchase. Specifically, using a game-theoretic framework, we explore the conditions under which a premium offering can be a signal of quality of the product whose purchase is required for a consumer to avail of the premium. We analyze the characteristics of the separating equilibrium and the pooling equilibrium of our model to derive insights. We then compare the signaling effectiveness of the premium offer with other signals such a price and advertising. Our research derives implications for the design of the premium offer from a signaling point of view.

5- Signaling in a Horizontally Differentiated Market through Word-of-Mouth

Sreelata Jonnalagedda, Assistant Professor, Indian Institute of Management Bangalore, E 208, Faculty Block, Bilekahalli, Bangalore, 560076, India, sreelata@iimb.ernet.in

Word-of-mouth can significantly influence consumers' perception of products. Firms therefore are interested in understanding and managing this marketing phenomenon. For example, websites like bzzagent.com enable marketers to choose agents who are picked to try new products for free and spread their opinion about them. We model a monopolist firm that operates in a horizontally differentiated market. The firm has private information about the type of her product and signals this by her choice of agent. The agent experiences the product and communicates his message to consumers; both the agents and consumers are distributed over the horizontal space according to their preference. We establish conditions under which firms separate themselves through the type of agent they choose to generate buzz. We find that contrary to intuition there are conditions under which a firm chooses an agent who does not align with her own type, we explain why such equilibrium may arise.

■ SB05

05- Montblanc

Movies

Contributed Session

Chair: Rahat Ullah, PhD student, KAIST, GSCT (CMP LAB),N-5 Building, KAIST, 291, Daehak-ro, Yuseong-gu, Daejeon, Daejeon, 305-701, Korea, Republic of, rahatuom@yahoo.com

1 - Estimating Consumer's Movie Choice with Non-Compensatory Decision Analysis

Youngju Kim, Korea University, Korea University Business School, AnamDong, SungbukGu, Seoul, 133-070, Korea, Republic of, aa0124@korea.ac.kr, Jaehwan Kim

The aim of this study is understanding consumer's movie choice using non-compensatory decision model. Let's assume that you are planning to go to the movie theater on this weekend. When you surf the internet to find the attractive movie, you might be under a difficulty to select one in the various movie options: all manner of genres are there; many actors appear; some receive rave reviews from critics; some already went viral; When people confront this kind of situation, where having many choice options with various choice criteria, they often use non-compensatory decision rule. To reflect this choice behavior in consumer's movie choice, we adapt the non-compensatory decision model. The data was gathered using choice based conjoint analysis and it is estimated with Bayesian MCMC. The findings such as investigating how movie-related variables do their role in the screening stage and choice stage will be shared in our presentation.

2 - Optimizing Movie Release Timing across Channels and International Markets

Sumaiya Ahmed, University of New South Wales, Level 3 Quadrangle Building, Sydney, Australia, sumaiya.ahmed@unsw.edu.au, Ashish Sinha

Managers often face the problem of when to release different versions of a product such as a movie at the box office (BO) or on DVD. The interdependent nature of these channels, where the performance of one can impact positively or negatively on the performance of another, means that timing the release of different channels is extremely important for firms. This problem is compounded for firms that serve global markets, which presents additional decisions about when to release for different channels in multiple geographic markets. For example, the movie could be released simultaneously in every channel and in every market, or released at different times for every channel and every market, or some combination of these two. The interdependent nature of these release decisions makes it difficult for managers to optimize total sales. The goal of this paper is to develop a model to assist managers in making optimal timing decisions across multiple channels and markets. We develop a copula model that incorporates movie, channel and market features to understand film performance in each separate market and channel, and link them together using a pair-copula construction in order to understand the dependence structure and predict total sales. We also incorporate heterogeneity across movies, channels and markets. We estimate the model on a data-set of over 400 movies between 2005-2010. While we focus on the motion picture industry, our modelling approach is easily extendible to any market where there are dependences between channels and geographic regions. Finally we conduct a "bake-off" between our model and a variety of other models in the literature, and show the improvement in managerial decision-making that comes from implementing our model.

3 - Like the Book, Hate the Movie? Understanding the Drivers of Adapted Movie Evaluations

Amit Joshi, University of Central Florida, 4000 Central Florida Blvd, CBA, BA-II, 308V, Orlando, FL, 32816, United States of America, amit.joshi@ucf.edu, Huifang Mao, Zachary Johnson

Movies are frequently adapted from best-selling books and other sources, and movie studios usually spend millions of dollars promoting this connection. Though anecdotal evidence may suggest that consumers familiar with the source material (book) would rate the adaptation (movie) lower, there has been no scientific study into this 'adaptation penalty.' Results from a multi-method analysis using data from both controlled experiments as well as secondary sources, confirms an 'adaptation penalty' effect wherein consumers generate reduced evaluations of movies adapted from books as compared to an original screenplay, an effect that emerges independent of the book quality and whether consumers read it. Moreover, this effect is qualified based on the moderating impact of Consumers' Need for Uniqueness (CNFU). Our results provide an important theoretical contribution to the literature on brand extensions, while also having several useful managerial implications, regarding the promotion of movies.

■ SB06

06- Monterosa 1

Applied Theory in Marketing

Cluster: Special Sessions

Invited Session

Chair: Juanjuan Zhang, Massachusetts Institute of Technology, 77 Massachusetts Avenue, Cambridge, MA, United States of America, jjzhang@mit.edu

1 - Word of Mouth Bias and Optimal Communication Strategies

Yogesh V. Joshi, University of Maryland, 3301 Van Munching Hall, College Park, MD, 20742, United States of America, yjoshi@rhsmith.umd.edu, Andres Musalem

We analyze a setting in which dissipative advertising can be used as a signal of unobserved quality of an experience good, consumers share information via word of mouth, and realized word of mouth might potentially be biased. We study the impact of four distinct behavioral word of mouth biases reported in extant literature: negativity, positivity, disconfirmation and confirmation, on a firm's communication strategy. A priori, one might expect that for instance when consumers disproportionally share more negative experiences over positive ones (i.e. negativity bias), a firm should be more cautious about setting high quality expectations, as rational consumer beliefs are reduced more strongly by negative experiences under higher expectations. Interestingly, we show that when consumers are (disproportionately) more likely to share negative experiences, a firm becomes more aggressive in setting high expectations. This is because when negative word of mouth is prevalent and consumers hear about a negative experience, they are more likely to be forgiving while updating their beliefs. The firm realizes this, and consequently becomes more aggressive in setting high expectations. Similar results hold when consumers share surprising experiences more than consistent ones. We show that our results are robust to differing levels of consumer awareness, and the presence or absence of repeat purchases. Overall, we conclude that as word of mouth biases increase, a firm finds it optimal to shift to a more aggressive communication strategy.

2 - A Model of Brand Portfolio Strategy

Matthew Selove, University of Southern California, Los Angeles, CA, United States of America, selove@marshall.usc.edu, Jeanine Miklós-Thal, Michael Raith

Experimental and empirical research shows that the success of brand extensions is driven by two main determinants: first, the perceived quality of the brand, and second, the 'fit' between the brand and the extension product category. Existing game-theoretic analyses of branding, however, ignore the role of fit. This paper incorporates the notion of fit into a game-theoretic model of branding and derives implications for a firm's optimal dynamic brand portfolio strategy. Consumers learn about a firm's skill along multiple dimensions of competence through their experiences with products under the same brand. Different dimensions of competence may matter in different product categories. Our model implies that product categories are more related if there is high overlap between their relevant competence dimensions, and a brand is a better fit for a product category if the brand owner has already proven its ability on the relevant dimensions for that category. Thus, successful brand extensions provide a basis for future brand extensions into related categories and gradually enlarge the breadth of the brand's credibility. In some cases, a brand extension that is unprofitable in the short term could be profitable in the long term by making future brand extensions possible. Conversely, a brand extension that is profitable in the short term could be unprofitable in the long term by diluting the information provided by the brand.

3 - Information Disclosure and Ratcheting in Dynamic Setting

Jiwoong Shin, Yale University, New Haven, CT, United States of America, Jiwoong.shin@yale.edu, Brian Mittendorf, Dae-Hee Yoon

This research examines how ratcheting affects a retailer's disclosure and investment incentive and how a manufacturer responds to the ratcheting problem through wholesale pricing. We consider two period game where a retailer receives market demand information after it purchases products from a manufacturer in the first period. Based on the private signal, if the market turns out to have good potential, a retailer can make investment to further increase the market profitability and the increased market profitability can create benefits for both a retailer and a manufacturer. In this dynamic setting, we show that under certain conditions, ratcheting arising from dynamic consideration of retailer can help manufacturer to induce retailer's truthful information disclosure in the first period, which increases total supply chain efficiency.

■ SB07

07- Monterosa 2

Behavioral Pricing

Contributed Session

Chair: Monika Käuferle, University of Cologne, Albertus-Magnus-Platz 1, Cologne, Germany, kaeuferle@wiso.uni-koeln.de

1 - Partitioned Pricing of Hedonic Versus Risk Mitigating Product Features Given Prior Risk Perceptions

Dipankar Chakravarti, Professor, Johns Hopkins University, Carey Business School, 100 International Drive, Baltimore, MD, 21202, United States of America, dipankar.chakravarti@jhu.edu, Joydeep Srivastava, Rajesh Bagchi

We report three studies examining how prior perceptions of performance risk moderate product evaluations when the prices of risk mitigating utilitarian (versus hedonic) product features are presented in partioned or consolidated fashion. When consumers assess low (product performance) risk, partitioned pricing of a risk-mitigating feature (e.g., a warranty) makes the risk more salient and lowers evaluations. Here, partitioning the price of a hedonic feature (e.g., styling) deflects attention away from risk to consumption and raises evaluations. In contrast, if consumers perceive usage risk to be high, partitioning the risk mitigating feature lowers performance concerns and raises evaluations.

2 - Payment Sequence Preferences: Paying too Much Today and Being Happy about it Tomorrow

Bernd Skiera, Goethe University Frankfurt, Grüneburgplatz 1, Frankfurt, 60323, Germany, skiera@wiwi.uni-frankfurt.de, Fabian Schulz, Christian Schlereth

Advance payment systems are popular among utility providers, insurance providers and governments. In these systems, service providers commonly predict their customers' usage for a billing period (usually a year) and set (monthly) advance payments such that the sum of advance payments equals the value of predicted usage. Any differences between actual and predicted usage are balanced at the end of the billing period, such that customers either receive a refund or have to make an extra payment. This paper analyzes if this common practice is in the customers' and the provider's interest. In an experiment, we show that customers prefer to make higher advance payments to increase the probability of refund receipt and are even willing to pay more for such sequences. This observation is inconsistent with discounted utility theory, but can be explained by customers' risk aversion, emotionality and preference for disaggregated payments. In consequence payment sequences also affect customer attitudes and behavior. Merging survey and billing data of 840 electricity customers outlines that customers who paid a higher share of their yearly bill in advance are less price conscious and more likely to recommend their provider. The analysis of billing data from more than 20,000 customers reveals that paying more in advance also reduces churn and tariff switching risk. Thus, service providers and customers are better off if payment schemes are designed such that customers pay a higher share of their total bill in advance.

3 - Limited Memory Consumers and Price Dispersion

Levent Kutlu, Assistant Professor, Georgia Institute of Technology, 221 Bobby Dodd Way, Atlanta, GA, 30332, United States of America, levent.kutlu@econ.gatech.edu

This paper examines the effects of a limited memory on the price competition between firms. The consumers are aware of their memory limitations and use their limited memory to categorize the prices. The valuation of the consumers are assumed to be heterogeneous. In particular, the valuation function is linear. The introduction of heterogeneity in the consumer valuation enables us to examine the effects of price discrimination. We examine both uniform and price discrimination scenarios. If the consumers categorize prices non-optimally, it is possible to observe price dispersion even when each firm charges a uniform price. However, if the consumers optimally choose their categorization scheme, then uniform price prevails.

4 - Reference Price on Brand Choice across Online/Offline Grocery Channels: Internal vs. External

Javier Cebollada, Associate Professor of Marketing, Public University of Navarre, Campus Arrosadia s/n, Pamplona, 31006, Spain, cebollada@unavarra.es, Marta Arce

We study the influence of Reference Price (RP) on consumer brand choice across the online and offline channels of a grocery retailer. The reference price is a mental price consumers form and compare against the actual price of the product before making a purchase decision. Two kind of reference prices have been identified in the literature: Internal Reference Prices (IRP, based on past prices stored in memory), and External Reference Prices (ERP, based on current prices at the point and time of purchase). We analyze the shopping behavior of a set of multichannel households who purchase interchangeably in the online and offline channels of the same grocer in the category of orange juice. We find that when purchasing offline, both IRP and ERP have a significant effect. On the other hand, when purchasing online, only IRP have a significant effect. We also investigate the moderating role of consumers purchase frequency on the effect of IRP and ERP. Whereas for frequent shoppers the previous results hold, for infrequent shoppers, the effect of ERP increases considerably at both channels. From these results, interesting recommendations for management can be made. For example, under a Hi-Lo retailing strategy (high regular prices with frequent and deep discounts), to strongly influence consumers offline, retailers should not only have to promote the brand but also promote it with a discount large enough to position the brand's price under the mean price in the category. In the online channel, just a small promotion of the brand would be needed. That is, the depth of discounts should be greater offline than online.

5- The Effect of Reference Products on the Price Image of Retailers

Monika Käuferle, University of Cologne, Albertus-Magnus-Platz 1, Cologne, Germany, kaeuferle@wiso.uni-koeln.de, Katia Allexi, Werner Reinartz

As part of the shopping process, consumers choose a store from a set of given alternatives. This decision carries greater implications for saturated markets, where these stores are often equally accessible. In this case, consumers typically base their decision on other distinguishing criteria, such as for example store price evaluations. Ceteris paribus, consumers prefer the store with the lowest prices (price level image) and/or the best value for money (price value image). However, the objective evaluation of a store's price image is challenging if not impossible as it requires full information on the prices of all products as well as the ability to evaluate each product's price level and value. Thus, consumers use simple cues to form their judgements. One such important cue is the so-called reference product (RP), i.e., a limited set of products that consumers use for price comparisons. Retailers can benefit from this phenomenon by adapting their pricing strategy accordingly. They could reduce the prices of RPs while keeping the prices of all other products constant or even increasing them. Thus, it is crucial for retailers (1) to understand how and under which conditions RP affect a store's price image and (2) to be able to identify these critical products. Using an experimental setting, the authors find that price reductions of RPs lead to a more favourable price image even if a firm increases the prices of non-RPs. Besides, the study reveals characteristics of RPs which helps retailers to identify RPs in order to optimize their pricing strategy. The study contributes to existing research as it is the first study that measures price image as two-dimensional construct (price level and value image) and that shows the empirical link of RPs to a store's price image.

■ SB08

08- Edelweiss

Corporate Social Responsibility

Contributed Session

Chair: May Wang, Assistant Professor, United International College, 28 Jinfeng Road, Zhuhai, China, ywang.uic@gmail.com

1 - When Doing Good Leads to Increased Customer Loyalty: Which Firms Benefit from CSR?

Jenny van Doorn, University of Groningen, P.O. Box 800, Groningen, 9700 AV, Netherlands, j.van.doorn@rug.nl, Marnix Bügel, Peter Verhoef, Marjolijn Onrust

To extend previous research on the effect of corporate social responsibility (CSR) on customer outcomes, this study explains variation in the relationship between CSR and customer loyalty. We adopt the theoretical lens of social identity and organizational identification theory to describe the joint effect of CSR and company, individual relationship characteristics as well as product and context factors on customer loyalty. Social identity theory posits that customers who are psychologically attached to the organization are more loyal and willing to expend effort to support it. We expect perceived CSR efforts to be of particular relevance in situations when these identity-based relationships are threatened. Identity threats can be sought in different factors impacting the relationship a customer has with a company, such as organizational characteristics, individual relationship characteristics and product and context factors. We therefore study a wide range of contingencies at the organizational, individual customer and industry level to explain the relationship between perceived CSR and customer loyalty. We find that the positive effect of CSR on customer loyalty is stronger when customer relationships are weaker, as for instance indicated by low satisfaction levels. In line with social identity theory, we find that intense competition makes perceived CSR more important for customer loyalty, probably to increase the distinctiveness of the identity. A company's CSR record may furthermore compensate for the absence of visual identification opportunities when purchasing less visible products and services. Switching barriers also enhance the importance of perceived CSR efforts for customer loyalty.

2 - The Effect of Social Pressure on Corporate Social Responsibility

Paola Mallucci, University of Minnesota, 321 19th Ave. S., Rm. 3-150, Minneapolis, MN, 55401, United States of America, mallu004@umn.edu, George John, Tony Cui

The goal of this study is to better understand consumers' reactions to products featuring charitable donations. These corporate social responsibility (CSR) actions evoke two effects: 'warm glow' and 'social pressure.' On one hand, these products appeal to customers because the warm glow they derive from choosing a product associated with a donation to their favored causes increases with the size of the donation. At the same time, when donations reach a threshold amount, consumers feel social pressure to behave generously. While such pressure might move a consumer to purchase the product, it might also lead them to opt out of the market to escape the pressure. Intuitively, warm glow effects benefit the producer. However, might aversion to social pressure imply that rational firms never use charitable donations to appeal to consumers? In three separate experiments, we find empirical evidence for warm glow sensitivity and social pressure aversion. We quantify these effects with a utility function that embodies these opposing effects and find them approximately the same order of magnitude. To develop this idea further, we build a model of a profit-maximizing firm that recognizes warm glow and social pressure aversion preferences of its customers. Under both monopolistic and duopolistic market structures, we show that when warm glow is large enough, a firm will donate at sufficient levels to evoke social pressure, despite the demonstrated customer aversion to social pressure. Put differently, despite the negative effect on consumers' preferences, employing social pressure in a CSR context can be profitable. Why? Intuitively, social pressure diminishes price sensitivity.

3 - Go Regular! Who Gains from Large-Size Soda Bans?

Ratula Chakraborty, Senior Lecturer in Business Management, University of East Anglia, Norwich Business School, Norwich, United Kingdom, r.chakraborty@uea.ac.uk, Paul Dobson, Eitan Gerstner, Jonathan Seaton

A storm of controversy greeted the decision to ban eateries from selling large soda sizes over 16 ounces (500 ml) in New York City from March 2013. Proponents have argued that the size cap will lead to reduced consumption of large sugared drinks that are contributing to the obesity epidemic. Critics have argued that such a ban infringes consumer sovereignty, is discriminatory, and/or will prove ineffective. Yet, other cities and other countries are now contemplating similar bans. This paper considers how eateries and consumers might respond to such a ban in respect of the prices set and amounts consumed where consumers have different preferences: some happy to supersize their sodas for bargain prices with little thought for health consequences; but others keen to restrict their calorie intake from sugared drinks and ignoring the temptation of bargain prices for large soda sizes. We investigate the direct and immediate economic effects from a ban, not the longer-term health effects from changed consumption patterns. These direct economic effects have tended to be overlooked in the wider debate other than the view that industry will lose out through diminished sales and consumers determined to drink large amounts will have to buy and pay for multiple units, i.e. a potential lose-lose situation. However, this view ignores how a ban might affect vendors' pricing behavior in targeting different consumer types. As this paper shows, it is possible–but not inevitable–that both consumer welfare and economic welfare could increase with such a large size ban even when it leads to reduced sales. This provides an economic argument in support of the ban in addition to a heath argument. Nevertheless, this economic argument comes with a number of important caveats.

4 - How Does the Explanation after a Crisis Affect Consumers Trust and Distrust towards the Company?

May Wang, Assistant Professor, United International College, 28 Jinfeng Road, Zhuhai, China, ywang.uic@gmail.com, Xiaoyun Chen

The goal of a communication strategy in the face of a crisis should be eventually to restore consumer trust. Companies have to manage consumers' attributions of blame, as well as their negative thoughts about the brand, by providing a clear explanation about the crisis. Effective explanations will help restore consumers' trust and avert the distrust. Whether trust and distrust are distinct constructs or the opposites of a trust-distrust continuum has been a debated topic in various fields. In a context of crisis, the companies involved have to take into consideration the interests of both consumers and themselves. On the one hand, they need to fulfill consumers' requests. On the other hand, the companies also need to consider their own interests since companies in crisis may hesitate to confess their faults due to legal considerations. The companies have to earn money by reducing cost to some extent and they do not rely solely on the requirements and needs of consumers. Therefore, both consumers trust and distrust may exist simultaneously in this scenario. The first focus of this study is to theorize and test the effects of explanations on consumers trust and distrust from persuasion and knowledge-based trust perspective. Based on attribution theory and the concept of locus of control in literature, two kinds of explanation were designed in the experiment. This study further examines one contingent factor, i.e. consumers' skepticism towards the brand. Based on schema theory, this study takes a closer look at the interaction effects of explanation and this consumers' trait of skepticism towards the brand. In this study, we assemble a framework that highlights when specific communication strategies should be used to help a brand restore consumers trust and avert distrust.

■ SB09

09- Mimosa

Return and Complain Behavior

Contributed Session

Chair: Ricardo Montoya, University of Chile, Department of Industrial Engineering, Republica 701, Santiago, Chile, rmontoya@dii.uchile.cl

1 - The Analytics of Product Return Episodes: Impact of Restrictions on Return Privileges

Michele Samorani, Assistant Professor, Operations Management, University of Alberta, 3-20B Business Building, Edmonton, AB, T6G 2R6, Canada, samorani@ualberta.ca, Paul Messinger, Aydin Alptekinoglu

We provide an episodic analysis of consumer returns and analyze the profitability of retail product return policies in light of this analysis. A product return episode consists of a sequence beginning with a new purchase, a return of that product, a repurchase of a similar product, etc., concluding with a final purchase or a final return. Using cluster analysis, we identify empirical return patterns of abuse (that for particular segments of episodes are very unprofitable). We consider customized return policies for particular consumers or episodes based on a relatively simple profit model that we propose. We distinguish between and analyze the advantages and disadvantages of adaptive versus fixed screening restrictions on customer return privileges. Our empirical analysis utilizes the ISMS durable dataset (I) for a large consumer electronics retailer in North America. We seek to predict whether episodes are profitable (before they begin) and consider the profit implications of various restrictions on return policies (blacklisting based on measured attributes in the data).

2 - Empirical Analysis of the Effect of Out-of-Stocks of Fast-Moving Products on Customer Behavior

Ricardo Montoya, University of Chile, Department of Industrial Engineering, Republica 701, Santiago, Chile, rmontoya@dii.uchile.cl, Marcelo Olivares

Out-of-stocks (OOS) remains a large problem for retailers, with OOS rates that fall in the range of 5-10%. Customers facing an OOS may choose to buy a substitute product from the same store, may delay the purchase and decide to come back later to buy when it becomes available or may decide not to purchase from the store anymore. These scenarios have different cost implications for retailers, and therefore understanding how a customer behaves when encountering an OOS is essential to quantify the economic costs associated to them. Past research has investigated the potential effect of OOS on customers' behavior. Most of such research relies on physical store audits that provide measures of OOS at specific periods of time. However, this procedure may fail to correctly identify customers facing an OOS. Especially, in the case of fast-moving products. We use a novel dataset collected through digital cameras that record the in-shelf availability and identifies OOS. In addition, we have point-of-sales (POS) data from relevant transactions during the studied period. We use the time-stamp of the POS transaction to link the in-stock data with the customer purchase data. A key feature of the supermarket we study is that a large fraction of their purchases are from loyalty card holders. This is used to construct a panel dataset of customer purchases, which enables us to control for customer heterogeneity. Our findings can help store managers in two ways. First, we estimate the effect (lost sales and substitution) induced by product OOS and use it to assign a financial value to the cost of OOS considering consumers' response to such OOS. Second, these findings can help to determine the optimal service level that retailers could offer.

3 - Integrating Relationship Marketing Activities into Organizational Complaint Handling

F. Javier Sese, Assistant Professor, University of Zaragoza, C/Maria de Luna, s/n, Zaragoza, 50018, Spain, javisese@unizar.es, Jesus Cambra, Iguacel Melero

This research focuses on investigating the effect of relationship marketing activities on customer profitability when the customer has experienced a service failure and filed a complaint. While the effect of relationship marketing on the development of successful relationships has received considerable attention in prior research, studies have frequently ignored the consequences of implementing relationship marketing campaigns when the customer has complained to the firm. Several managerially relevant questions emerge: Do customers react positively to relationship marketing when they have experienced a service failure? Can relationship marketing leverage the impact of complaint handling on customer profitability? Or does relationship marketing instead cause more damage to the relationship because customers perceive that these investments can be better used to more effectively resolve the complaint? To answer these questions, we propose a conceptual framework to understand the direct effect of relationship marketing on customer profitability as well as its indirect effect through the moderating influence in the relationship between complaint-handling and profitability. The framework is tested empirically in the financial services using longitudinal data for a sample of 791 customers. Using a latent class model to control for heterogeneity the results show that while for some customers investing in relationship marketing leverages the impact of complaint-handling on CLV, for others relationship marketing decreases the effectiveness of complaint-handling. Also, this research offers insights into the profile of customers who react negatively to relationship marketing, providing companies with some guidelines to more effectively allocate relationship marketing resources.

■ SB10

10-Asuka

Mobile Marketing

Contributed Session

Chair: Scott Neslin, Dartmouth College, Tuck School of Business, 100 Tuck Drive, Hanover, NH, 03755, United States of America, scott.neslin@dartmouth.edu

1 - Consumers Un-Tethered: A Three-market Empirical Study of Consumers' Mobile Marketing Acceptance

Fareena Sultan, Northeastern University, D'Amore-McKim School of Business, Marketing Group, Boston, MA, 02115, United States of America, f.sultan@neu.edu, Andrew Rohm, Margherita Pagani, Tao (Tony) Gao

This study examines factors influencing consumers' acceptance of mobile marketing across three influential markets, namely U.S., China and Europe. In developing an integrative conceptual model on consumers' attitudes and behaviors toward mobile marketing, the authors go beyond current conceptualizations of acceptance models (primarily the TAM and innovation diffusion models) to unite technology-based factors with consumer characteristics central to mobile marketing in explaining consumer attitudes, as well as consumers' subsequent acceptance of and participation in mobile marketing activities. More importantly, they examine the moderating roles of consumer characteristics such as personal attachment (to the mobile device), innovativeness, and risk avoidance on the effects of technology factors (e.g., usefulness perceptions) on attitude toward mobile marketing. Focusing on Generation Y consumers, the conceptual model is empirically tested with data from U.S., China, and Europe using the structural equations modeling approach. The findings illustrate several cross-market differences and similarities regarding the relationships between individual-level characteristics, attitude, and mobile marketing activity. Research and managerial implications of these findings are discussed. Keywords: Global marketing, mobile marketing, consumer acceptance of new marketing platforms, innovations diffusion, branding, wireless communications, and youth consumers.

2 - Evolution of Mobile Services in UK Retailing: A Longitudinal Study of Developments and Expectations

Sonja Laatti, Aalto University, Dept. of Marketing, P.O. Box 21230, Helsinki, 00076, Finland, sonja.latti@aalto.fi

A decade ago, the exact implications that mobile technologies would have on businesses were difficult to discern. Today, these implications can be widely observed due to rapid technological development. In retailing, mobile services have become increasingly important as retail services can be accessed through mobile devices anywhere, anytime. While mobile efforts in retailing have gained a growing interest in literature, there is little longitudinal research on the development of mobile services in retailing from the emergence of the first services until recent developments. This study examines the development of mobile services in a UK retailing context from a longitudinal perspective. The empirical part included an archival data collection for a twelve-year time frame from 1999 to 2011 in two UK retail industry magazines and one newspaper. The findings of the study present four central stages of mobile commerce development. The first stage was characterized by the high expectations towards the first mobile phones with an Internet access. Text message services dominated the second stage, while the launch of smartphones revolutionized the scene in the third stage. The fourth stage saw the introduction of advanced services such as the scanning of bar codes. These stages depict how technology was first highlighted over services and how the emphasis shifted over time. The study discusses also the changing expectations about mobile technologies and services that arise from the data in the form of a hype cycle. Suggestions are provided on how to validate this hype cycle. This study brings new insight into retailing by capturing the evolution of mobile services in four stages. Thus, future implications of mobile technologies and services developed may be easier to predict.

3 - The Evolution from Mobile Users to Mobile Shoppers

Mingyung Kim, Yonsei University, SK Global House, Yonsei-ro, Seodaemun-gu, Seoul, Korea, Republic of, mingyung.kim@yonsei.ac.kr, Yerim Chung, Jeonghye Choi

Smartphones have penetrated rapidly and mobile shopping provides promising market opportunities to retailers. However, little is known about mobile shopping. We combine mobile browsing data, mobile panel survey, and mobile panel characteristics together and examine three steps in mobile shopping: adoption of shopping apps, and purchase and spending through shopping apps. The exploratory look into mobile data and its empirical analyses provide three new substantive findings. First, the variables of mobile browsing improve understanding of mobile shopping and the extent of improvement depends on the mobile shopping steps. Second, the information about shopping-unrelated apps helps to understand who would adopt shopping apps. Third, purchase and spending through shopping apps can be predicted by the browsing information of shopping apps and shopping-unrelated apps have little-to-no use. Implications for mobile retailing research and practice are discussed.

4 - The Impact of Mobile App Usage on Consumer Purchase Behavior

Scott Neslin, Dartmouth College, Tuck School of Business, 100 Tuck Drive, Hanover, NH, 03755, United States of America, scott.neslin@dartmouth.edu, Harald van Heerde, Isaac Dinner

Smartphones present firms with a host of opportunities to interact with customers, but also pose a difficult strategic challenge. One particularly common occurrence is when a retailer creates an app allowing customers to access information about the retailers' offerings, although a limited ability to purchase. While these apps allow consumers to actively engage with the retailer, a pressing question is whether app usage has a positive impact on the bottom line across all channels: consumer purchase behavior. This is the primary issue we address in this research. Our data consist of over a thousand customers who have downloaded an app that features a 'product of the day' for a high end clothing retailer. For each customer we observe a time series of app access as well as purchasing both the featured product through the app (which is not price discounted) as well as products in other channels. We formulate customer-level models of (1) accessing the app and (2) purchase of featured products, purchase of products from the featured products' category, and total retail purchases–through both Internet and the bricks-and-mortar store. The access model incorporates seasonality, previous purchase behavior, fixed effects, advertising, and importantly, exogenous updates (improvements) the retailer makes to the app. This exogeneity allows us to identify the effect of app usage on the purchase behavior model. Preliminary results suggest that app usage increases the likelihood of subsequent purchases, even after controlling for seasonality and fixed effects.

■ SB11

11- EMBA 2

Structural Models

Contributed Session

Chair: Yu Yu, Assistant Professor, Georgia State University, 35 Broad Street, Atlanta, GA, 30303, United States of America, yyu5@gsu.edu

1 - An Empirical Study of Pre-Market Licensing for Drug Innovation

Manuel Hermosilla, PhD Candidate, Northwestern University, Kellogg School of Management, 2001 Sheridan Road, Evanston, IL, 60640, United States of America, m-hermosilla@kellogg.northwestern.edu

To take advantage of productive efficiencies and reduce time-to-market, transactions in markets for technology should occur earlier on in the technology's development (Arora et al., 2001). However, substantial contracting delays are commonly observed, suggesting that frictions may play a relevant role. Focusing on the market for developing biopharmaceuticals, I develop a structural model that characterizes two prominent types of imperfections, innovator-based adverse selection and moral hazard. The model is estimated exploiting variation in time-to-license decisions, contract design, and development transitions. Results crystalize the intuition that compounds with low privately observed quality are more likely to enter the technology market than their high quality counterparts, and conditional on doing so, more likely to do it sooner, highlighting the role of the adverse selection problem. While non-contractible innovator effort is estimated to significantly impact developmental success, contract design successfully aligns incentives for its provision, reducing the burden of the moral hazard problem.

2 - Learning by Doing and Consumer Switching Cost

Yufeng Huang, Tilburg University, Warandelaan 2, Tilburg, 5037AB, Netherlands, y.huang@uvt.nl

This paper attempts to explain the long duration before a compact camera user decides to transition to a single-lens-reflex (SLR) camera, despite the latter produces much better picture quality. I develop a theory that is new to the empirical literature on consumer dynamics. Simply put, i) consumers' photographic specific human capital - i.e. their ability to produce good pictures - increases along with their experience accumulation; and more importantly ii) such human capital is only partially transferred to a different type of camera, hence creating a switching cost, which is key to explain the slow transition to SLR cameras for many consumers. I estimate the evolution process of the consumer human capital, as well as their decision process of camera purchasing, from a unique data on both camera ownership and quality of pictures. There is strong evidence for both learning by doing and consumer switching cost. The implied markup for the same group of consumers when their human capital has matured, is 12.3% higher than when they are at their initial states. In addition, median consumers are willing to pay as much as a 144% price premium to permanently eliminate the switching cost - suggesting a huge potential welfare gain in doing that. Finally, my counterfactual experiments show that firms do have an incentive to provide such investments, particularly in presence of competition.

3 - Very Simple Markov-Perfect Industry Dynamics

Nan Yang, National University of Singapore, Business School, 15 Kent Ridge Drive, Singapore, yangnan@nus.edu.sg, Jaap Abbring, Jeffrey Campbell, Jan Tilly

This paper develops an econometric model of firm entry, competition, and exit in dynamic oligopolistic markets. The model entertains market-level demand and cost shocks, sunk entry costs, and parameters that capture economic barriers to entry and the toughness of price competition. Nevertheless, its analysis is very simple. We show that the model has an essentially unique symmetric Markov-perfect equilibrium that can be computed quickly by solving a finite sequence of low-dimensional contraction mappings for their fixed points. We develop a nested fixed point procedure for the model's maximum likelihood estimation from market-level panel data and compare this procedure's performance to that of a mathematical programming with equilibrium constraints approach. The framework is rich enough for a range of applications, such as the welfare analysis of licensing requirements, start-up subsidies, and environmental laws. Moreover, its analysis provides a starting point for the analysis of more general models.

4 - A Structural Model of the Post Patent Ethical Drug Market

Yu Yu, Assistant Professor, Georgia State University, 35 Broad Street, Atlanta, GA, 30303, United States of America, yyu5@gsu.edu, Yi Zhao

US policy makers have been looking at various ways to curb the rising health care costs in USA, including ways to promote the use of generic drugs in lieu of brand drugs. However, such a policy intervention requires a structural understanding of the generic drug market. In this paper, we study consumer's buying behavior and generic competition in the post patent ethical drug markets. Specifically, we highlight three interesting and puzzling features in this market: 1) the increasing trend in brand drug prices; 2) the "pioneering advantage" in market shares enjoyed by the first generic drugs entering the market; and 3) the gradual changes in brand and generic drug prices. Although there have been papers demonstrating some of these phenomenon, our paper is the first to incorporate all the three phenomenon in the same model (with specification of both supply and demand side) and empirically estimate the parameters from aggregate data. We recover two classes of consumers with different price sensitivities, which explains the brand price increase. We identify consumers' switching cost between different drugs, which accounts for the generic "pioneering advantage" and the gradual changes in brand and generic drug prices. We also estimate the production costs of brand and generic drugs based on the supply side model. We conduct policy simulations to illustrate the effect of: 1) Obamacare on consumer price sensitivity towards brand and generic drugs; 2) patients' beliefs about generic drugs and their equivalence with branded drugs; and 3) government regulation over generic drug prices.

■ SB12

12- Geneve

Competitive Response

Contributed Session

Chair: Jimi Park, PhD Student, Korea University, Business School, Anam-Dong, Seongbuk-Gu, Seoul, 136-701, Korea, Republic of, jimipk@korea.ac.kr

1 - Competitive Interactions in Promotional Strategy among Prescription Drugs

Abhik Roy, Professor, Quinnipiac University, Marketing & Advertising Dept, SB-DNF, 275 Mount Carmel Avenue, Hamden, CT, 06518, United States of America, Abhik.Roy@quinnipiac.edu, Mary Schramm

An aggregate model is used to capture the competitive interactions between brands of prescription drugs on marketing activities such as detailing and direct-to-consumer (DTC) advertising. Special cases of the general model developed by Amaldoss & He (2009) are considered, with different levels of brand specificity in the content of DTC advertising. The propositions from this model are tested using data on promotional spending (detailing), DTC advertising, prices and brand sales for prescription drugs in a number of markets such as depression, cholesterol, erectile dysfunction and osteoporosis. This is combined with qualitative analysis of the content of DTC advertising–classification of the advertising as either promoting the drug category (disease based) or brand specific. It is found that brands, which promote the treatment category in their advertising are Stackelberg leaders in detailing spending but not in DTC ad spending. In other words, strategic behavior on promotional activities is related to the level of brand specificity in the creative content of advertising. However, competitive strategy in detailing or advertising spending, whether the strategic behavior is independent Nash or Stackelberg leader-follower, does not depend on elasticity of demand with respect to price.

2 - Exit, Market Research and Entry: When, Where, How?

Markus Christen, Associate Professor, INSEAD, Boulevard de Constance, Fontainebleau, 77300, France, markus.christen@insead.edu, David Soberman

The marketing literature has focused on examining the effect of competition on market entry decisions and market entry order. Little is known about how the observation of entry/exit by first movers in a market affects the entry and information gathering strategies of followers. By staying in a market, the incumbent firm signals to entrants that it is a viable market, at least for one firm. A new entrant considering entry between this market and other markets which have yet to be entered, must also choose between different levels of market uncertainty. How does this affect the market research decisions of a new entrant? Should it do market research in the competitor's backyard or should go where no firm has gone before and research a new market? How is this decision affected by factors like market conditions, research costs? Our research provides insight about whether market research is more likely to be observed in markets that have already been entered or in market that are virgin. In addition, we demonstrate how informative exit and market research affect market outcomes? We are also able to predict how cost conditions lead to either increased markets or increased competition in existing markets?

3 - Hypercompetitive Rivalry in Contests

Jeff (Cexun) Cai, University of Pennsylvania - Wharton, 3730 Walnut Street Suite 700, Philadelphia, PA, United States of America, caicexun@wharton.upenn.edu, Robert Meyer, Jagmohan Raju

Outcomes of contests in marketing and economics depend on how agents think about competition. To arrive at accurate predictions of competitive outcomes, identifying critical variables that influence behavior is desirable. Drawing from the literature on social comparison, we propose a stylized theoretical model of two hypercompetitive agents engaged in competition who care about–in addition to his or her absolute performance–relative performance with regards to the other agent. Theoretical propositions suggest that such behavior may result in a Prisoner's Dilemma for the two agents, and is in line with empirical evidence. We develop our model further to examine the effects of asymmetry in hypercompetitiveness, and explore whether hypercompetition can endogenously arise in the presence of uncertainty in performance and the need to signal for quality.

4 - Investigating Competitive Reaction Volatility: The Measurements and Propositions

Jimi Park, PhD Student, Korea University, Business School, Anam-Dong, Seongbuk-Gu, Seoul, 136-701, Korea, Republic of, jimipk@korea.ac.kr, Shijin Yoo

Virtually no firms are free from competition. They show various kinds of competitive reaction (CR) such as retaliation versus accommodation and direct versus indirect reactions to a rival's marketing actions. Although a firm's CR should be understood as a series of managerial actions, extant literature has not considered this temporal aspect of CR. This research examines whether and how a firm's CR differs over time and develops a model for measuring and understanding this competitive reaction volatility (CRV). Our model is based on a rolling-windows time series analysis and is applied to the CRV of price and advertising in the salty snack category over a five-year time span. We found that the competitive reactions are indeed volatile not only in the case of direct reactions, i.e., price (advertising) changes are countered by price (ad) changes, but in the case of indirect reactions, i.e., price (ad) changes are countered by advertising (price) changes. We further demonstrate that the CRV is contingent upon the market positions of the attacking and defending brand. For example, the CRV between close competitors is different from that between competitors relatively apart. Due to the time varying competitive reactions, consumers may delay or accelerate purchases that will bring demand uncertainty, which in turn affects the firm's future investment decisions. In addition, this study may answer why the most predominant competitive reaction is non-reactive in previous research since, for example, some fluctuations of competitive reactions may be averaged out to zero. Managerial implications regarding competitive strategies are discussed as well.

■ SB13

13- Luzern

Social Influence Online

Contributed Session

Chair: Patrali Chakrabarty, Assistant Professor, Indian Institute of Management Bangalore, A202, IIM Bangalore, Bannerghatta Road, Bangalore, Ka, 560076, India, patrali.chakrabarty@iimb.ernet.in

1 - Does Peer Pressure Always Lead to Conformity?

Monic Sun, Stanford University, 2315 Melhorn Dr, Alhambra, CA, 91803, United States of America, monic@stanford.edu, Feng Zhu, Michael Zhang

The need to conform and belong to a group is widespread among animals, and is often considered as a fundamental human nature. While the need for uniqueness is also documented for human beings in individualistic societies, many theorists doubt whether it can be seen as a fundamental human need. We investigate whether the need for uniqueness constitutes an innate human nature. In a field experiment with 16,298 subjects in China, we examined whether they conformed to or diverged from the most popular choices among their friends. The experiment allowed us to eliminate confounding effects such as pre-existing taste similarities between a subject and her friends, the need to signal one's group identity to the general public, and the possibility of learning from friends' choices. We found that, on average, a subject was more likely to diverge from the popular choice among her friends as the popularity of that choice increased. Divergence was even more pronounced when the subject was reminded that her choice was visible to her friends. Furthermore, female subjects and subjects born in more affluent regions had a stronger need to be different from their friends. Our results suggest that once we eliminate contextual influences, uniqueness seeking emerges as an innate human nature even for members of a collectivist culture.

2 - Modeling Civic Socialization and Purchasing Intentions in the Context of Social Media and Blogs

Despina Karayanni, Assistant Professor of Marketing, University of Patras, University Campus, Rio, Patras, 26500, Greece, karayan@otenet.gr, Nickoletta Koutsogiannopoulou

This study provides a theoretical model on civic socialization and purchasing intentions in the context of social media and blogging. Specifically, we examined data collected by an on-line survey from 180 individual participants (18-60 years of age), to determine: i) the effects of social capital motivation, civic participation, personal identity declaration and risk perceptions (i.e., regarded as socialization antecedents) upon civic socialization and self-confidence (i.e., regarded as socialization outcomes) and, ii) the effects of civic socialization and self-confidence upon one's purchasing intentions. The model was tested using the AMOS statistical program and proved to be robust. However, the significant relationships partially assessed the study hypotheses, implying the relative interpretation powers of the study's antecedents upon civic socialization outcomes, respectively. Moreover, the hypothesized effects of both civic socialization and self-confidence upon purchasing intentions were statistically significant, leading to some useful implications and directions for future research. For example, we need to delve to further streams of research, i.e., the political science and the political communication theory, to interpret the ability of civic socialization to affect purchasing intentions. It appears that if participation in, and interaction with Social Media may influence one's deeply mind-entrenched political, economic or social attitudes, which tackle with the uncontrollable environment and one's life values, then the influence upon buying decisions which are issues of comparably lower significance (i.e. as they are more or less controllable by the buyer), may be regarded as a normal sequence.

3 - Online Reviews and Consumers' Willingness to Pay: The Role of Uncertainty

Yinglu Wu, Assistant Professor of Marketing, University of Wisconsin-Stevens Point, CPS 417, 1901 Fourth Avenue, Stevens Point, WI, 54481, United States of America, ewu@uwsp.edu, Jianan Wu

Numerous studies are conducted to investigate the impact of online reviews, from which we find mixed influences of review volume and variance on companies' marketing outcomes such as sales (Chintagunta et al., 2010; Zhu and Zhang, 2010) and price (Dewally & Ederington, 2006; Li et al., 2009). Several important researches have emerged to explain the mixed results on sales price (either market equilibrium price or consumers' willingness to pay) at the market level. The perspective of mismatch cost framework (Sun, 2012) argues that due to consumers' heterogeneous product tastes, the impact of review variance varies by review valence. The perspective of classic expected utility framework (Wu and Ayala 2012; Wu et al., 2013) argues that due to heterogeneity of consumer uncertainty preferences, the impact of review variance varies by consumer risk attitude. Both frameworks have gained good empirical support, but they do not accommodate each other. Moreover, neither of the proposed models can explain the mixed impact of variance by valence at the individual level. We extend these streams of research and argue that the mixed impacts of volume and variance may occur at the individual level, regardless of a consumer's product taste or risk attitude. We propose that a consumer's uncertainty weighting leads to her preference towards review volume and variance. Such preference not only varies across individuals based on risk attitude, but also changes within an individual based on review valence. Studies are conducted to examine the impact of bidirectional seller reviews (e.g. eBay review format) on consumers' WTP. The framework is tested using an experimental study and an online empirical study. Results from both studies provide good support for this broader framework.

4 - Social Marketing through Choice of Online Product Review Medium

Patrali Chakrabarty, Assistant Professor, Indian Institute of Management Bangalore, A202, IIM Bangalore, Bannerghatta Road, Bangalore, Ka, 560076, India, patrali.chakrabarty@iimb.ernet.in

Product reviews generated on social networking sites influence customers' perception of products. This helps customers identify the products that best match their idiosyncratic usage conditions. We conduct experiments in a simulated ecommerce environment to gauge if source credibility is adversely affected when the review is hosted on a social networking site, versus when it is hosted on an ecommerce website. In this we embed a moderating influence of type of product (one directly associated with a social cause versus one that is not). We observe that reviews generated for products with a social cause suffer low source credibility when hosted on social networking websites. However, the size of network boosts the credibility of such reviews.

■ SB14

14- Zurich

Social Networks

Contributed Session

Chair: Puneet Manchanda, University of Michigan, Ross School of Business, 701 Tappan Street, Ann Arbor, MI, 48109, United States of America, pmanchan@umich.edu

1 - The Effect of Personal Customer Communication and Sweepstakes in Social Networks

Joerg Burkhardt, Research Assistant, Friedrich-Alexander-University of Erlangen-Nuremberg, Lange Gasse 20, Nuremberg, 90403, Germany, joerg.burkhardt@wiso.uni-erlangen.de, Martina Steul-Fischer

Companies use social networks (e.g. Facebook) to communicate with their customers and to get new fans or followers. This research experimentally examines how customers should be addressed in social networks and how sweepstakes as frequently used instruments to attract fans can make a contribution. We compare personal and impersonal customer communication in Facebook as the biggest social network worldwide. We find that personal communication leads to a higher willingness to comply in Facebook than impersonal communication and personal communication is perceived more credible. We also find that women show a higher willingness to follow a company if the contact person is a man. However, men show a higher willingness to follow if the contact person is a woman. Based on the results about the influence of sweepstakes on the willingness to comply we show that the kind of prizes in sweep-stakes influences participation. In our experiment we use three different kind of prizes: (1) prizes with decreasing values (one prize: 5.000 ⇔ two prizes: 2.500 ⇔ three prizes: 1.000 ⇔), (2) one prize with a high value (13.000 ⇔ and (3) material prizes (TabletPC). Prizes with de-creasing values promote more participation in sweepstakes than one high-value prize and one high-value prize leads to a higher participation than material prizes. We also find that revealing personnel data, which is the main purpose of sweepstakes and important for the acquisition of new customers, leads to a disproportionate decrease in participation in sweepstakes. Consequently, sweepstakes are less suitable for the acquisition of fans. In addition, we find an interaction effect of gender, risk aversion and willingness to participate.

2 - Unraveling the Effects of Top Marketing and Sales Executives' Experience: Social Network Perspective

Aditya Gupta, PhD Candidate, Pennsylvania State University, 406A Bus. Building, University Park, PA, 16802, United States of America, aug20@psu.edu, Rui Wang, Rajdeep Grewal

In business-to-business markets, top marketing and sales executives, TMSE(s), have considerable influences on firms' customer strategies. Their prior work experiences endow these executives with tacit knowledge of the market and influence their strategic choices. Moreover, TMSEs' prior experiences can indicate the flow of information, knowledge, and resources among organizations. That their movements from one firm to another result in a pattern of organizational connections. To study this pattern of organizational connections, we construct a complete TMSE experience network based on the work experience records of TMSEs at 113 semiconductor firms in the US. We consider network variables (i.e., indegree, outdegree, and structural holes) and their interaction with TMSEs experience variables (i.e., time with the firm), and with firm level marketing variables (i.e., market orientation). In our model we account for unobserved heterogeneity using latent segments on the intercept (keeping explanatory variables weights same across segments) and also correct for endogeneity of network variables using latent instrumental variables approach. Our results suggest that the network constructed represents a flow of social resources and market information among firms. Firm's marketing resources benefit from TMSEs joining the firm: representing bringing in of knowledge from previous firms. More importantly, the firm's marketing resources also benefits from TMSEs leaving the focal firm to join other firms and this is explained as the path embedded social capital. Path embedded social capital, can facilitate value creation and is associated with firm performance. Further, firm's ability to absorb the social capital is very critical in realizing the value from the TMSE experience network.

3 - Work or Network? How Human Brand Managers (and Who They Know) Shape Job Market Outcomes

César Zamudio, Assistant Professor, Marketing and Entrepreneurship, Kent State University, 800 E. Summit St., Kent, OH, 44240, United States of America, czamudi1@kent.edu, Julie Guidry Moulard, Angeline Close

A product's attributes are cues that consumers interpret to assess product quality. Analogously, human brands, such as celebrities and job candidates, use human brand cues to market themselves to potential 'buyers.' Current research implicitly assumes these cues are chosen by the human brand alone. However, the potential role that 'human brand managers,' such as agents, middlemen, or academic advisors, play in shaping market outcomes remains unknown. We conceptualize the role of human brand managers and empirically investigate their effects on market outcomes in the context of academic placements. We posit that a job candidate's advisor–the candidate's human brand manager–and the advisor's social relationships serve as an additional signaling mechanism for the candidate. We test our hypotheses using data from the marketing job market. We find that advisors influence candidates' salaries through their own research productivity (+$442.24 per top article published) and Sheth consortium attendance (+$4,082.77), but not interviews or campus visits. Additionally, the effect of advisors' social relationships is hypothesized to vary in strength depending on how visible they are to market participants. As such, we also uncover hidden 'communities' of advisors using a social network clustering algorithm on co-placement patterns. We find that when advisors belong to dense co-placement communities, candidates benefit from additional AMA interviews (up to 4.74), additional campus visits (up to 6.32), and additional salary (up to $11,548.33) after controlling for candidate quality. This implies that human brand managers shape job market outcomes directly and by networking with other managers, and that their role in signaling value is sometimes superior to the human brand's quality.

4 - Performance in Multilevel Marketing: An Empirical Analysis

Puneet Manchanda, University of Michigan, Ross School of Business, 701 Tappan Street, Ann Arbor, MI, 48109, United States of America, pmanchan@umich.edu, Eunsoo Kim

Multilevel marketing firms are usually organized as tree networks with each node (independent distributor) charged with the responsibility of adding lower level nodes. Each node earns revenue in one of two ways - via sales to lower level nodes and direct sales to end customers. While there are a lot of opinions about the viability of the multilevel marketing firm for an independent distributor, there is a paucity of data based analyses in the literature. We leverage a novel dataset provided to us by a large multilevel marketing firm to examine the determinants of performance of independent distributors affiliated with the firm. Our results suggest that differences within and across the sub-networks (that comprise the whole network) are related to performance.

Saturday, 1:30pm - 3:00pm

■ SC01

01- Montreux

Social Media Dynamics

Cluster: Internet and Interactive Marketing

Invited Session

Chair: Wenjing Duan, Associate Professor, The George Washington University, 2201 G Street, NW, Washington, DC, 20052, United States of America, wduan@gwu.edu

1 - Understanding the Dynamics of Social Product Usage

Tingting Fan, New York University, 40 West 4th Street, Room 921, New York, NY, 10012, United States of America, tfan@stern.nyu.edu, Eitan Muller, Peter Golder

Social products (e.g., smartphones and Facebook) have been widely adopted. But adoption cannot ensure the success of these products. Companies have realized that just getting a consumer to adopt their product does not help marketers to succeed if consumers do not use it regularly. However, our understanding of how consumers use social product in a relatively long term is very limited. We study the dynamics of social product usage by tracking college freshmen's usage of smartphones and Renren.com (China's Facebook) for 8 weeks. The usage data also includes usage incidence and duration of each product feature (e.g., message, email, and camera on smartphones). A multi-category model of discrete/continuous choice is used to simultaneously address product feature usage incidence and duration. We found that the usage time of both smartphones and Renren.com decreases over time. However, the usage time of individual feature varies–the usage time of major features (e.g., text messages) increases first and then decreases; whereas the usage time of minor features (e.g., email) decreases along time. Furthermore, we found that the past usage of one feature has 'spillover effects' on the usage of other features. For example, the more a consumer used camera on smartphone, the more he uses text messages and email. But the more a consumer used email on smartphone, the less he uses phone call and text messages. The results of our research will help managers (1) promote deeper and broader social product usage; (2) design and improve their products based on consumer usage experience; and (3) make profits out of the most used product features.

2 - Mapping Products on Social Tagging Networks: Insights for Demand Forecast and Positioning

Hyoryung Nam, Erasmus University Rotterdam, Erasmus School of Economics, Rotterdam, Netherlands, nam@ese.eur.nl, William Rand, P. K. Kannan

Social tagging is a new way to share and categorize content, allowing users to express their thoughts, perceptions, and feelings with respect to concepts such as products or brands with their own keywords, 'tags.' With this system, products can be connected through user-generated keywords, and the rich associative information in social tagging networks provides marketers with opportunities to infer customers' mental schema toward a product. This research investigates whether the semantic position of products on social tagging networks can predict sales dynamics. This research shows that product positioning maps utilizing products-to-tags networks have distinct informational value in predicting sales dynamics. More specifically, this research suggests that (1) books in long tail can increase sales by being strongly linked to socially popular keywords and well-known keywords with high degree centrality and (2) top sellers can be better sellers by creating dense content clusters rather than connecting them to well-known keywords with high degree centrality. Our findings suggest that marketing managers understand better a user community's perception of products and potentially influence product sales by taking into account the positioning of their products within social tagging networks.

3 - The Impact of Online Word-of-Mouth on Television Show Viewership: A Curvilinear Temporal Dynamic

Romain Cadario, PhD Student, Paris Dauphine University, Place Maréchal de Lattre Tassigny, Paris, 75016, France, romain.cadario@dauphine.fr

This research investigates the dynamic impact of online word-of-mouth (WOM) on U.S. television show viewership. The WOM data consists of user reviews, collected from the Internet Movie Database website. Viewership data are collected from Nielsen ratings. Our sample include 41 shows. Consistent with previous studies, we examined two main WOM metrics. First, valence of online WOM is measured with a rating scale. Second, volume of online WOM is measured commonly with the number of votes per episode. We attribute the effect of online user reviews as an indicator of underlying word-of-mouth that could play a dominant role in driving viewership. Based on multiple regressions, we find that the cumulative volume of online WOM offers significant explanatory power for viewership over time. Furthermore, consistent with the "mere exposure" effect theory, we find that the dynamic impact of volume of online WOM over time vary in the form of a curvilinear inverted U-shaped curve. In the first phase, there is a floor effect such that the volume of WOM is not significant in the early episodes. Then, the impact of volume increases over time, before reaching a maximum and starting to continually decrease in the latter part of the show's lives. This research demonstrates differential effects of online WOM over time. It suggests that firms' online marketing strategies such as media-planning need to adjust in respect to product life cycle.

4 - Social Media and New Drug Performance in the Pharmaceutical Industry

Wenjing Duan, Associate Professor, The George Washington University, 2201 G Street, NW, Washington, DC, 20052, United States of America, wduan@gwu.edu, Andrew Whinston, Qing Cao, Vicky Gu

With the increasing availability of social media data sources, recent years have seen an emergence of academic and industrial research that taps into this abundant supply of data. However, the utilization of these data sources remains in an early stage and outcomes are often mixed. In this research, we propose to employ advanced sentiment analysis techniques to examine the impact of social media on new drug performances from multi-dimensional perspective. The critical role that new products play in firm success is well documented in the literature. However, extant research has mainly focused on examining product development, product market and management strategies, and product launch strategy. The increasing importance of the Internet-enabled consumer-generated media, documented in many other areas of research, however, seems to be largely overlooked in studying new product entries and performances. New drug entry strategies and performances are particularly important in pharmaceutical markets, given that as high as 50 percent of new products fail at their launch. The strong consumption externalities arises when the adoption of a drug by some consumers influence its valuation and rate of adoption, which could even lead to the dominance of one drug. Such externalities in pharmaceutical markets are largely informational in nature, on which social media may potentially has huge impact. In this research, we seek to investigate the dynamics of consumer sentiments generated from social media and their influence on new drug performances.

■ SC02

02- Lausanne

Search and Media Effectiveness

Cluster: Internet and Interactive Marketing

Invited Session

Chair: Savannah Wei Shi, Assistant Professor of Marketing, Santa Clara University, 500 El Camino Real, Santa Clara, CA, 95053, United States of America, wshi@scu.edu

1 - AT&T and iPhone: Multi-Channel Advertising ROI

Chen Lin, Assistant Professor of Marketing, Michigan State University, 632 Bogue Street, East Lansing, MI, 48823, United States of America, linc@bus.msu.edu, Sandy Jap

AT&T and iPhone entered an exclusive contract from June 29, 2007 to February 10, 2011. When a new product bundle is introduced, how should the firm allocate its advertising resources and what is the impact on multi-channel advertising on its retail channels? What combinations of advertising channels would give the highest ROI for a given set of retail channels? Using longitudinal advertising, cost and weekly DMA sales data from AT&T, this research examines 1) the impact new product introduction of Apple iPhones (with many versions including 8GB, 16GB and 32 GB, and generations including original iPhone, iPhone 3G, iPhone 3GS and iPhone 4) on AT&T wireless sales and 2) the optimal resource allocation of advertising spend across online and offline channels. The authors generate insights on advertising ROI for new products in a multi-media, multi-channel environment.

2 - Conditions for Owned, Paid and Earned Media Effectiveness: The Performance Impact of Online Customer

Ceren Demirci, PhD Student, Ozyegin University, Nisantepe Mah. Orman Sok, Istanbul, 34794, Turkey, ceren.demirci@ozyegin.edu.tr, Koen Pauwels, Shuba Srinivasan, Gokhan Yildirim

Within the growing variety of online marketing, customer-initiated communication (CIC) such as search and social media stands out in terms of current spending and future growth potential. Many companies have invested in 'paid' CIC, such as paid search and affiliate marketing, 'earned' CIC such as Facebook and Twitter campaigns, and 'owned' CIC, such as their websites. However, the relative effectiveness of these different CICs remains an unanswered question. Our research takes a contingency perspective to hypothesize and demonstrate how brand strength and the search versus experience nature of the category favors different types of customer-initiated online media. Our empirical analysis uses Bayesian Vector Autoregressive (BVAR) models to estimate long-term sales elasticities, while imposing restrictions to avoid over-parametrization and wrongly-signed coefficients. We find that earned CIC is most effective in generating sales in all conditions. Paid CIC is more sales effective than owned CIC for search goods while the opposite result holds for experience goods, for which consumers perceive a higher risk in purchase. Moreover, the synergy among offline, firm-initiated marketing (e.g. TV) and online CICs increases as the perceived risk increases from known brands of search goods to unknown brands of experience goods. We conclude with managerial insights on managing an expanded marketing communications mix that includes multiple media and channels, and rich marketing communications.

3 - Product Placement and Web Search

Simcha Jong, Assistant Professor, University College London, Dept. Management Science and Innovation, Gower Street, London, SE5 8RJ, United Kingdom, s.jong@ucl.ac.uk, Enrico Forti, Maria Vittoria Antonacci

Product placement in movies and other forms of entertainment is an increasingly important advertisement tool in the marketer's toolbox. While there is an abundance of survey-based and experimental studies devoted to the psychological mechanisms behind product placement, empirical work that has directly investigated the performance implications of this advertisement tool is scarce. In our paper, we use Google Search data to conduct an event study employing regression analyses with data from 942 product placement observations by 261 brands. Our dependent variable is a direct measure of consumer interest and is defined as the web search volume of a brand during the placement week (when the movie containing the placed brand was released) minus the search volume of the same brand during the previous week. Our results offer a number of important new insights into factors shaping the effectiveness product placements. First, we find that product placement is positively associated with abnormal search volume for the placed brand and that the longer is the duration of a placement in a movie, the higher is the rise in frequency of web searches. Second, blatancy of product placements is negatively associated with a placement's performance. Third, placements executed by embedding real products are associated with higher search volume. Fourth, in the case of fashion brands, plot connection is positively associated with abnormal search volume. Fifth, placement performance is higher for less popular brands. These new insights will have important practical implications for both buyers and sellers of product placements.

4 - Bid Pulsing Strategy and Keyword Performance

Savannah Wei Shi, Assistant Professor of Marketing, Santa Clara University, 500 El Camino Real, Santa Clara, CA, 95053, United States of America, wshi@scu.edu, Xiaojing Dong

In search engine advertising, there exist two keyword auction formats: one is Generalized First Price Auction (GFP), the other is Generalized Second Price Auction (GSP). Previous literature suggested that GFP is naturally unstable because bidders tend to 'game the system,' while in GSP, bidders are less likely to change their bidding value. However, the latter proposition is lacking empirical evidence. Indeed, we have found around 60% of advertisers pulse their bidding values under GSP format; moreover, such bid pulsing behavior can be observed during the entire time period across companies. The objective of this research is to examine the type of bid pulsing strategy that advertisers implement in the search engine keyword auction, and more importantly, whether and how bid pulsing affect keyword auction. We find that the keyword performances, i.e., click, rank, and impression, are significantly influenced by bid pulsing strategy; and the effects vary across different keyword categories. Our results provide implication for search engine advertisers in terms of their bid pulsing strategies under GSP format.

■ SC03

03- Bern

Field Studies in Emerging Markets

Cluster: Special Sessions

Invited Session

Chair: Om Narasimhan, London School of Economics, Houghton Street, London, WC2A 2AE, United Kingdom, o.narasimhan@lse.ac.uk

Co-Chair: Rajesh Chandy, Professor and Wheeler Chair, London School of Business, Regent's Park, London, NW1 4SA, United Kingdom, rchandy@london.edu

1 - Marketing vs. Finance: A Randomized Evaluation

Stephen Anderson-Macdonald, London Business School, Regent's Park, London, NW1 4SA, United Kingdom, sjam.phd2009@london.edu, Rajesh Chandy, Bilal Zia

This research presents initial evidence from the first randomized evaluation of the impact of marketing skills relative to finance skills on business activities and outcomes. The empirical setting of the research is among micro-enterprises in slum neighborhoods in Cape Town, South Africa. We offer intensive marketing and sales training to one randomly selected group of entrepreneurs, intensive finance and accounting training to another randomly selected group of entrepreneurs, and no training to a control group. We then describe the effects of these interventions on the business lives of these entrepreneurs.

2 - Do Sympathy Biases Induce Charitable Giving? The Persuasive Effects of Advertising Content

Subroto Roy, University of New Haven, West Haven, CT, United States of America, SRoy@newhaven.edu, K. Sudhir, Mathew Cherian

This paper documents the persuasive effects of advertising content on charitable giving using large scale field experiments. We randomize advertising content motivated by the psychology literature on sympathy generation and framing effects in mailings to about 185,000 prospective new donors in India and find significant impact on donations consistent with sympathy biases such as the "identifiable victim," "in-group" and "reference dependence." We also find that a monthly reframing of the ask amount increases giving relative to daily reframing. A second experiment targeted to past donors, finds that the effect of sympathy bias on giving is smaller in percentage terms but statistically and economically highly significant in terms of the magnitude of additional dollars raised.

3 - Why do Some Micro-Entrepreneurs Do Better than Others? The Role of Pricing Latitude in Driving Performance

Magda Hassan, Cambridge University, Cambridge, Judge Business School, Cambridge, CB2 1AG, United Kingdom, mh577@cam.ac.uk, Jaideep Prabhu, Rajesh Chandy, Om Narasimhan

Micro-entrepreneurs–those who own and run businesses with less than five employees–are by far the most common type of entrepreneurs in the world. Yet their business practices are poorly understood, and their performance–especially in developing countries–is often poor. Nevertheless, even in the face of very daunting obstacles there are some micro-entrepreneurs who manage to escape the subsistence trap and do well. Why then do some micro-entrepreneurs do better than others? In this paper we argue that flexibility in pricing (what we call pricing latitude) is a crucial driver of performance. Further, we develop a theory of how micro-entrepreneurs can acquire greater pricing latitude and improve performance. We argue that the imitation of simple rules of thumb from more successful peers or 'positive deviants' (what we call peer-learning) is an important guide for increasing pricing latitude. Additionally the choice of product assortment influences the ability of the micro-entrepreneur to exercise pricing latitude. We test our theory and hypotheses through a field experiment on a sample of 500 micro-entrepreneurs in a large slum in Cairo, Egypt in which we randomize on (1) peer learning and (2) product assortment. We measure the impact of the intervention on both intermediate (e.g., pricing latitude) and final (e.g., revenues, profits) outcomes. We discuss the implications of our research for marketing theory, managerial practice and policy making.

4 - When and Where Were You Born? The Influence of Firms' Founding Conditions on International Growth

Elaine Y. N. Oon, University of Cambridge, Trumpington Street, Cambridge, CB2 1AG, United Kingdom, yno20@cam.ac.uk, Jaideep Prabhu, Kulwant Singh

International growth is a strategic marketing decision for firms worldwide. Although prior research has examined several determinants of international growth, little is known about the role played by firms' founding conditions. To address this gap, this paper addresses the following question: Does the international growth of a firm depend on its founding conditions? Drawing on organizational imprinting theory, institutional theory and the resource-based view, we hypothesize that firms founded during a crisis expand internationally less than firms founded during a stable or boom period. However, firms' ability to expand internationally depends on their founder type (i.e., family, business group, or government) and the varying levels of institutional development of the firms' country of founding (i.e., developed versus less developed). Contrary to existing research, we predict that family firms founded in less developed institutional environments tend to grow internationally more than family firms founded in more developed institutional environments. We also hypothesize that family firms founded during a crisis tend to grow internationally more than non-family firms. We test these hypotheses on 18 years of longitudinal data across multiple industries in six East Asian markets. Our dataset and empirical approach exploits the 1997-1998 Asian Crisis to set up a quasi-natural experiment with firms in three cohorts: those founded just prior to the crisis, during the crisis, and just after the crisis. Our theory and findings contribute to a deeper understanding of firm founders in emerging markets and illuminates the differential effects of institutional development and macro-economic environment in shaping international growth.

■ SC06

06- Monterosa 1

Experiential Marketing

Contributed Session

Chair: Joelle Lagier, Professor, Rouen Business School, Bld. Andre Siegfried, Mont Saint Aignan, 76130, France, jlg@rouenbs.fr

1 - A Hedonic Consumption Based Analysis of Popularity of Hindi Film Music

Soumya Sarkar, Assistant Professor, Indian Institute of Management Udaipur, MLSU Campus, Udaipur, RJ, 313001, India, soumya.sarkar@iimu.ac.in, Madhupa Bakshi

Even after 100 years, the popularity of Hindi film music does not seem to wane. The success of the soundtrack of a Hindi film plays an important part in the eventual success of the film. Also Hindi films command more than 50% of the music industry revenue. This has led to concentrated marketing effort by both the producers and the music companies to promote the music by launching the albums prior to the release of the film. Many studies have tried to capture the importance of music and its various characteristics viz. vocal melody, use of Indian and Western scale patterns and harmonization, etc. within the con-text of the film and the current social setup. Experts mention the distinctive feature of Hindi films soundtracks of being isolable from their narrative contexts, rendering them easily lendable to consumption. Studies have established that music consumption is predominantly hedonic due to creation of a world of escapism, fun or fantasy (Hirschmann & Holbrook, 1982). This study identifies the specific elements of Hindi film music that play important parts in creating a favor-able consumption attitude, uncovered through focus groups. Moreover, the personality of the in-dividual and the familiarity to music also are posited to have roles to play. The effect of each such element in making a certain song popular to the listening multitude is assessed in the next phase of the study by employing statistical methods. Thus we try to indicate the factors that make a particular song popular and the variables that the marketers should focus on. Reference: Holbrook, M B. and Hirschman E.C. (1982). The Experiential Aspects of Consumption: Con-sumer Fantasies Feelings and Fun. Journal of Consumer Research, 9(2), 132-140.

2 - Conspicuous Sensory Consumption as a Means for Self-Worth Restoration

Tanuka Ghoshal, Assistant Professor, Indian School of Business, ISB Campus, Gachibowli, Hyderabad, 500032, India, tanuka_ghoshal@isb.edu, Rishtee Batra

We propose that consumers use heightened sensory consumption as a means of restoration of their feelings of self-worth. Specifically, if a consumer's sense of self-worth is threatened, they indulge in conspicuous consumption in different sensory domains to compensate for their feelings of inadequacy. Contrary to conspicuous consumption, we propose that compensatory effects occur even for consumption experiences that are not publicly visible. In four studies we find that individuals under self-threat show a preference for visually loud product designs, louder levels of music, and a heightened need-for-touch. However, we find that engaging in a self-affirmation exercise negates the desire for heightened sensory consumption.

3 - Modeling Hedonic Adaptation in Shared Experiential Consumption

Natasha Foutz, University of Virginia, 340 RRH, Charlottesville, VA, 22903, United States of America, nfoutz@virginia.edu, Anocha Aribarg, Eunsoo Kim

Consumers are not only rational decision makers who focus on functional features and benefits, but also emotional human beings who seek pleasurable experiences (Holbrook et al. 1984). While utilitarian consumption is well studied, relatively little is known about how consumers evaluate experiential consumption, such as in sports and movies (Kahneman, Wakker, and Sarin 1997). Experience is affective, besides cognitive. It is dynamic and involves hedonic adaptation, i.e., reduced intensity of affective reactions, over time (Frederick and Loewenstein 1999; Nelson, Meyvis, and Galak 2009). It is often social, hence can be influenced by others sharing the experience (Ramanathan and McGill 2007; Ramanathan, McGill, and Vohs 2012). To account for these unique aspects of experiential consumption, we combine an experimental design, a physiological measurement of arousal (skin conductance), and a statistical model to examine how each consumer's retrospective evaluation of her overall experience is driven by her moment-to-moment arousal. We further examine how her hedonic adaptation is driven by her goal (entertainment versus socialization) and experiential context (with a friend versus stranger). This research provides managerial implications for experiential marketing.

4 - Marketing of Art or Art of Marketing: How to Break Resistance?

Joelle Lagier, Professor, Rouen Business School, Bld. Andre Siegfried, Mont Saint Aignan, 76130, France, jlg@rouenbs.fr, Virginie De Barnier

This article attempts to analyze resistance to the marketing of contemporary art. Several qualitative studies were conducted among professional actors in the art market, having links with public museums or non-profit artistic organizations in order to understand the perceptions and latent attitudes involved. Results show that professional actors discussed major themes such as economic pressure and fear of deviating from their mission. Elements of reassurance are recommended: the restoration of trust through transparency and membership and a return to a certain marketing of art or an art of marketing, focusing on positive emotions such as pleasure, recognition and satisfaction.

■ SC07

07- Monterosa 2

Modeling Heterogeneity

Contributed Session

Chair: Pieter Schoonees, Erasmus University Rotterdam, P.O. Box 1738, Rotterdam, 3000 DR, Netherlands, schoonees@ese.eur.nl

1 - Talk and Vice: How Relationships Affect Vice Behavior

Rachel Shacham, Assistant Professor, University of Minnesota, 321 19th Avenue South, Suite 3-150, Minneapolis, MN, 55455, United States of America, rshacham@umn.edu, Peter Golder, Tulin Erdem

We develop an empirical model that allows us to study the relationship between vice and communication while accounting for self-selection. The method developed in this study is particularly well suited to the issues that occur while studying vice (in contrast to other types of goods). In particular, we allow for heterogeneity that differentiates between heavy and light users.. We estimate the model using a unique dataset that contains detailed individual-level data over time.Third, we allow learning in the previous model. We test our model and generate insights using two data sets: (i) the web browsing behavior of 3000 individuals over one year and (ii) pornography websites categorized by strength.

2 - The Category Covering Problem for the Analysis of Generalized Sorting Task Data

Simon Blanchard, Georgetown University, 37th & O Street NW, 580 Hariri, Washington, DC, 20057, United States of America, sjb247@georgetown.edu, Daniel Aloise, Wayne S. DeSarbo

In the sorting task, consumers are given a set of cards with items on them (e.g. objects, products, brands) and are then instructed to sort the cards into piles so that the items in the same pile 'go together' according to their own perceptions. The task has been used in marketing and psychology for decades due to its intuitiveness to participants. Yet, there is a lack of procedures that can researchers and practitioners can use for analyzing sorting data without having to make arbitrary decisions that impact not only the information contained but also the results that follow. In this paper, we introduce the category covering problem for the analysis of generalized sorting task data, and a proposed optimization model that accounts for consumer heterogeneity. We 1) accommodate sorting tasks that have one or multiple cards per object/product/brand (Blanchard 2011; Blanchard and DeSarbo 2013), 2) model the piles directly (i.e. we do not require arbitrary conversions of piles into similarities into pairwise distances), and 3) solve quickly to a globally optimal solution.

3 - Detecting and Purging Response Styles with Constrained Dual Scaling

Pieter Schoonees, Erasmus University Rotterdam, P.O. Box 1738, Rotterdam, 3000 DR, Netherlands, schoonees@ese.eur.nl, Patrick J.F. Groenen, Michel van de Velden

Response styles arise in questionnaire research when respondents tend to use rating scales in a manner unrelated to the actual content of the survey questions. Such heterogeneous interpretation of the rating scale by individuals can generate misleading results since standard statistical models do not distinguish between the substantive information and the response style bias. To detect whether response styles are a concern, and to identify latent groups of respondents who exhibit the same response styles, we propose a constrained variant of dual scaling. Dual scaling is a multivariate exploratory statistical method, similar to correspondence analysis, but with a peculiarity that we show can be exploited to detect differences in response styles. Particularly, a constrained version of dual scaling is derived which can be used to detect four main types of response styles, namely acquiescence, disacquiescence, midpoint scoring and extreme responding. The method is based on an optimality criterion which incorporates monotone spline transformations in order to easily identify the type of response style detected. An interesting feature of the method is that it can be used to create a data set in which the effects of response styles are diminished. These data can then be used in subsequent analyses to obtain results which reflect more accurately the substantive information in the data. Simulation studies illustrate the success of the method. The method applied to empirical data is also presented which focuses on panelist's evaluation of 20 consumer products for a multinational corporation, which includes in-house brands as well as some competing products.

■ SC08

08- Edelweiss

Direct Marketing

Contributed Session

Chair: Shameek Sinha, Assistant Professor of Marketing, IE Business School, IE University, Calle de Maria de Molina 12, 5th Floor, Madrid, 28006, Spain, shameek.sinha@ie.edu

1 - Direct Mail Characteristics Effects on a Comprehensive Set of Advertising Effectiveness Measures

Daniela Naydenova, PhD Student, University of Groningen, Nettelbosje 2, Groningen, Netherlands, d.a.naydenova@rug.nl, Janny Hoekstra, Tammo Bijmolt, Jaap Wieringa

Most studies of direct mail effectiveness focus on the recipients' behavioral reaction usually measured in sales. However, direct mail is a tool that can have a number of advertising goals and is largely used for building customer relationships (De Wulf, et al., 2001). Therefore, our aim is to disentangle the effectiveness of direct mail characteristics using cognitive, attitudinal and behavioral measures corresponding to the different advertising goals. As a result of previous studies focusing mainly on response, which is the final stage in the process of handling a mailing, there is a lack of knowledge about effectiveness pertaining to the process of interaction with the mailing, which translates into advertising recall, increased brand/product awareness, worth of mouth, etc. In order to acquire a more comprehensive understanding of how direct mail characteristics influence direct mailing effectiveness, we consider which characteristics play a crucial role in the different stages of the direct mail handling process. Vriens et al. (1998) describe three consecutive stages undertaken by the recipient: opening, getting informed of the contents and responding to the mailing. These stages correspond to three main components of the mailing - envelope, contents (letter/brochure, etc) and offer. Each component has a specific set of characteristics that can have an effect on the measurements of direct mail effectiveness pertaining to each stage in the process of handling the mailing. We study 180 different mail characteristics from 300 mailing campaigns from 18 industries, matched with respondents' data by a random sample of about 150 recipients per campaign.

2 - Investigating the Effects of Mailing Variables and Endogeneity on Mailing Decisions

Nadine Schröder, University of Regensburg, Universitätsstr. 31, Regensburg, Germany, nadine.schroeder@wiwi.uni-regensburg.de, Harald Hruschka

Determining the optimal amount of mailings being sent to customers is crucial. However, this decision depends on various aspects. First, it is important to specify relevant mailing variables. By distinguishing different types of mailings we set our study apart from the majority of existing studies. Besides, modeling aspects also influence the outcome. We use a mixture of Dirichlet Processes to deal with unobserved heterogeneity. A policy function approach is used to avoid endogeneity bias. Based on a data set from a mail order company, we demonstrate that one needs to pay attention not to send too many mailings. We find evidence for endogeneity biases which we assess by comparing estimation results of a model taking endogeneity into account to those obtained for a model which ignores endogeneity. In a second step we identify how consideration of endogeneity leads to different managerial implications by a segment specific dynamic optimization of mailings.

3 - Optimal Coupon Targeting: Sequential Decision Making and the Value of Information

Shameek Sinha, Assistant Professor of Marketing, IE Business School, IE University, Calle de Maria de Molina 12, 5th Floor, Madrid, 28006, Spain, shameek.sinha@ie.edu, Frenkel Ter Hofstede, Vijay Mahajan

Customized targeting acts as a price-discrimination tool and provides information on response behavior over time, facilitating learning and adaptation. Using a value specification that captures trade-off between net revenue and information gain, the authors develop a decision theoretic approach to determine optimal coupon face values, target selection and mailing schedule. Optimizing coupon face values for revenue maximization is explored in literature, but researchers have not considered value of information. Using a discrete-time competing risk hazard model with effects of coupons, price levels and other promotional tools, we predict the timing of purchases. Then a sequential optimization algorithm is developed where past and expected customer responses affect coupon face values and optimal strategies are devised through natural experimentation. For handling computational issues of exponentially increasing decision paths, a reduced action space measured by sufficient statistic is proposed in the backward induction. Another methodological issue for the evaluation of intractable expected utility integrals is solved employing forward simulation. Given the sequential nature of decision making, update of parameters is done with a particle filter, thus avoiding re-estimation of the response model at every period. Optimization across the decision trajectories is done with a grid-based method where backward induction only considers optimal paths of subsequent periods. In a simulated retail environment, the proposed algorithm performs more efficiently than existing ones in sequential decision theory, specifically, static methods with considers net revenue and information gain, or dynamic ones incorporating sequential learning with net revenue, but without information gain.

■ SC09

09- Mimosa

Marketing Mix

Contributed Session

Chair: Goutam Challagalla, Georgia Institute of Technology, 800 W. Peachtree St., NW, Atlanta, GA, 30339, United States of America, gnc@gatech.edu

1 - Investigating Consumer Behavior Towards Self-Medication in the Light of Uncertainty Avoidance in Pakistan

Faryal Salman, Assistant Professor, SZABIST, 154-Clifton Karachi, Karachi, 75500, Pakistan, faryal.salman@szabist.edu.pk, Usman Warraich

In pursuit for seeking the understanding of the implications of Hofstede's cultural dimension, the current study assesses the relationship between uncertainty avoidance and incidence of self-medication among the consumers in Pakistan. The country scores a 70 on the dimension of uncertainty avoidance, which reflects on the fact that Pakistani's tend to avoid ambiguities and uncertainties. The authors of the study have attempted to explain the dimension of uncertainty avoidance through perceived risk and risk taking behavior in the light of consumer behavior towards self- medication. Self-medication is problematic not only in Pakistan but also all over the world. It is practiced due to a large number of reasons, reasons which encourage people to avoid consulting the physicians and resort to self-diagnosis and medication. Regardless of the reasons, it is a human behavior which requires to be studied in order to determine the factors which play a role in developing perception and attitudes among people.

2 - New Product Incrementality

Ronald Shokes, Senior Vice President, Market Fusion Analytics, New York, NY, United States of America, ron.shokes@marketfusionanalytics.com, Nazrul I. Shaikh

Firms in sectors such as consumer packaged goods (CPG) often compete based on the frequent introduction of new products and phasing out of old ones. The innovations and the insights groups at such firms are interested in knowing (1) what should the next stock keeping units (SKU) be (2) what is the sales potential of the new SKUs that are being planned, (3) what incrementality is expected from the new SKUs, i.e., how much will the new SKUs contribute to the growth of the manufacturers overall sales (the sales of the entire product portfolio), and (4) the takeaways, i.e., how much will the new SKUs source from SKUs offered by the competition and from the sales of other SKUs offered by the same manufacturer. The Bass model and its variants (Mahajan et. al., 2000; Lilien, et. al., 2012), case based reasoning, and the use of attribute based models within the discrete choice framework (Fader and Hardie, 1996) are some of the key methods that have been used for addressing the first point. However the estimation of incrementality and the takeaways have largely been left untouched. We provide an empirical approach to estimate a new SKUs incrementality to a manufacturer's product portfolio and quantify the takeaways from other SKUs in the product category. Our approach uses readily available store scanner data and also provides reliable SKU level sales forecasts that could be integrated with the standard inventory management systems.

3 - Customer Opportunistic Behavior: Does it Hurt or Help Them?

Goutam Challagalla, Georgia Institute of Technology, 800 W. Peachtree St., NW, Atlanta, GA, 30339, United States of America, gnc@gatech.edu

This paper investigates the consequences of customer opportunism toward their account manager in team selling environments. It introduces fear of internal ascription–the account manager's concern that others will question his/her dealings with a customer–as a key consequence of customer opportunism. This fear increases as account managers sense increasing customer opportunism towards them, and it propels them to block their teammates and manager from accessing their customers. Although this blocking may shield the account manager from potential loss of reputation, it comes at the expense of better serving the customer. As such, customers may be "shooting themselves in the foot" by acting opportunistically toward their account manager. In addition, this study introduces process deviation as an important moderator of the relationship between customer opportunism and fear of internal ascription. Matched data collected from 145 account managers and their direct supervisors indicate that customer opportunism yields higher fears of internal ascription when the account manager's work with a customer has deviated negatively with firm expectations.

■ SC12

12- Geneve

Category Effects in Choice Models

Contributed Session

Chair: Ralf van der Lans, Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong, Hong Kong - PRC, rlans@ust.hk

1 - Investigating Cross-Category Incidence and Quantity Decisions for Products Having Common Attributes

Karthik Sridhar, Assistant Professor, Ashland University, 401 College Avenue, Ashland, OH, 44805, United States of America, ksridhar@ashland.edu, Ram Bezawada

The sales of organic products have seen steady increase over the years across multiple categories. Given the above, preference for both related and unrelated organic products may be correlated across categories. Since the sales of organics in certain categories have grown to rival their conventional counterparts and that organic and conventional products may be substitutes for one another, it becomes relevant for retailers to identify purchase behavior both within and across categories to better manage overall category sales. In this research we investigate correlations in preference for category choice and also quantity purchased across different organic and conventional categories. For this purpose, we formulate a multivariate Type II Tobit model to incorporate incidence (e.g., choice of organic or conventional product) and conditional on incidence the quantity purchased across categories. This multivariate framework allows for more than one category to be purchased simultaneously, aids investigation of purchase complementarities and co-incidences at both the incidence and quantity levels and models differential impact of marketing variables on choice and quantity decisions. We estimate using hierarchical Bayesian techniques. We use scanner panel data of household-level purchases across multiple categories of organic and conventional products to calibrate our model. Preliminary results suggest the existence of compensatory purchase behavior involving produce categories. We observe substitutive behavior for perceived healthy categories. Our study can help retailers understand complementary, substitutive and compensatory variability in purchase behavior across products that share common attributes (e.g., organics) thus elevating their category management decisions.

2 - Variety, Quantity and Choice: The Additive Multivariate Ordinal Probit Model

Ralf van der Lans, Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong - PRC, rlans@ust.hk

In many categories, consumers purchase discrete quantities of multiple varieties. For example, when doing groceries for beer, consumers may purchase three bottles of brand A, four bottles of brand B, and one of brand C. Modeling such choices has been one of the major challenges in the choice literature, as it violates assumptions of standard choice models. In situations where consumers purchase multiple varieties, choice models need to incorporate 1) discrete quantity, 2) satiation, and 3) complementarity and/or substitution between items. To deal with these situations, previous literature mostly adapted the utility structure of standard choice models. As a consequence, these models have been difficult to estimate or had to introduce possibly invalid assumptions, such as continuous quantity or substitution between alternatives. In this research, instead of adapting the utility structure of standard choice models, we incorporate quantity, satiation, and complementarity vs. substitution patterns in the utility thresholds of the choice model. In addition to the standard utility threshold as in the multivariate probit model, we add and estimate thresholds for both quantity and variety. Application of our additive multivariate ordinal probit model to a dataset of over one-thousand customers of an ice cream store reveals strong satiation effects and substitution patterns between flavors. We further demonstrate how our estimation results could be used for assortment optimization.

■ SC13

13- Luzern

High-Tech and Service Marketing

Contributed Session

Chair: Indranil RoyChowdhury, Senior Research Associate, Infosys Limited, Electronic City, Bangalore, India, rcindranil22@gmail.com

1 - Design Optimal Software Free Trial Strategy in the Presence of Network Externality and Consumer Learning

Shuojia Guo, Rutgers Business School, 1 Washington Park, 1007E, Newark, NJ, 07102, United States of America, nancyguo@andromeda.rutgers.edu, S.Chan Choi

In the software industry, it is not rare that firms provide a limited time free trial of their full functionality software to help diffuse the product when it is newly introduced to the market. This paper focuses on analyzing how to design an optimal free trial strategy when there are varying degrees of value perception among consumers. These prior perceptions are corrected by learning through free trial. In particular, we want to find the tradeoff between the effects of consumer's reduced uncertainty and demand cannibalization, uncover the conditions under which firm can realize a higher profit through a limited time free trial offer, and help the firm determining an optimal length of free trial period.

2 - When Market Leaders Leave Their Tier: Asymmetric Pricing in Online Sales of High Technology Products

Sourav Ray, Associate Professor Marketing, McMaster University, 1280 Main Street W., DeGroote School of Business, Hamilton, ON, L8S 4M4, Canada, sray@mcmaster.ca, Paul Messinger, Charles Wood

Market leading firms' ability to afford large price premiums is often regarded as the key to sustain their profitability. In contrast, we argue that in high tech markets under certain circumstances, large price premiums and market power can actually motivate a market leader to abandon their high price premium tier and price at a much lower level. Using data collected from a popular shop ëbot, we examine 475,866 prices and 51,260 price changes for 810 high-tech products from 26 vendors over 283 days and find evidence to support our arguments. This research adds to the discussion of market friction and tiers by demonstrating that, in high-tech industries, drastic price cuts from market leaders that go beyond barriers to entry and loss leading can be profit maximizing.

3 - A Meta-Analysis on the Consequences of Service Fairness

Xia Wang, Peking University, Beijing, 100871, China, wangxiabnu@yahoo.com.cn, Hean Tat Keh

Realizing its importance for service evaluation, research on service fairness has been gaining momentum over the past 30 years. However, due to different research interests and the limitations in study design, the empirical findings are often mixed or even contradictory. Accordingly, our study aimed to synthesize the empirical studies and provide a quantitative summary of the cumulative findings through the approach of meta-analysis. Based on 459 correlations drawn from 62 articles, we assessed the absolute and relative strengths of service fairness dimensions (distributive, procedural, and interactional fairness) on nine outcomes, and analyzed the characteristics of the study design that may generate differences in the findings across studies. The results showed that four (i.e., customer satisfaction, word-of-mouth, trust, and service quality) of the nine outcomes had relatively strong relationships with the dimensions of service fairness. Besides, according to the multivariate analysis, for three (i.e., customer satisfaction, word-of-mouth, and trust) of the four outcomes, the dimension of distributive fairness was shown to be the strongest predictor. Furthermore, as the tests for homogeneity were significant, we did moderator analyses and found that the four characteristics of the empirical studies (i.e., the methodological approach, type of participant, service scenario, and service mode) moderated the relationships between service fairness dimensions and the outcomes to some extent. At last, we discussed the implications of our findings and presented several directions for future research.

4 - Adoption of Technology Facilitated Services

Indranil RoyChowdhury, Senior Research Associate, Infosys Limited, Electronic City, Bangalore, India, rcindranil22@gmail.com, Sanjay Patro

The interaction between a customer and service representative of a firm during the delivery of a service is termed as 'service-encounter.' The technology that enables service delivery without customer having a face-to-face service-encounter is known as 'self-service technology' (SST). Froehle and Roth described five different ways in which technology can be used in a service-encounter. One of the ways, known as Technology Facilitated Service (TFS), requires the simultaneous presence of three entities - customer, technology and service representative - during a service-encounter. Unlike SST, in TFS customer, technology and service representative must co-exist for the completion of the service. While most previous researches have focused on SST, this research studies the variables affecting the customer's 'Intention to Adopt TFS'(Itfs) and a conceptual model has been proposed. The variables affecting Itfs can be divided in two categories: (a) Human-Technology Interaction (H-T I) and (b) Human-Human Interaction (H-H I). Although, existing literature has dealt with variables related to H-T I, ex: 'ease-of-use'and 'perceived-usefulness' , the author tries to draw attention to H-H I variables, ex: 'facilitating-conditions' , which are potentially significant but have remained fairly untouched. For the purpose of the study a TFS was chosen and participants were drawn from relevant target market. A scientifically developed survey was monitored and data was collected from 222 participants. Structural Equation Modeling was used to analyze the conceptual model. The results strongly suggest that while H-T I factors are important, H-H I variables are equally critical during service delivery. H-H I variables become especially more relevant than H-T I in developing countries.

■ SC14

14- Zurich

Word-of-mouth

Contributed Session

Chair: Chander Velu, Assitant Professor, University of Cambridge, Judge Business School, Trumpington Street, Cambridge, United Kingdom, c.velu@jbs.cam.ac.uk

1 - Amplified Word-of-Mouth Effectiveness and Efficiency in the Marketing Mix

Ulrike Simon, European University Viadrina, Grofle Scharrnstrafle 59, Frankfurt(Oder), 15230, Germany, Simon@europa-uni.de, Farid Tarrahi, Florian Dost

Traditional advertising is losing its effectiveness making it ever more difficult for marketers to allocate and defend their budget. Adding amplified word-of-mouth (aWOM) to the marketing mix appears to be the remedy to cure this issue, since WOM effectively affects consumer behavior by persuasion. Additionally, respective campaigns feature low costs, which makes aWOM even more efficient. Literature has demonstrated the existence of aWOM campaign effects. However, much remains unknown about how effective or efficient aWOM is, compared to other marketing mix instruments. Furthermore, multiple aspects of marketing strategy, e.g. price or distribution, should determine when aWOM is more or less effective. Yet extant research focuses on which products stimulate WOM. Such research even provides a paradox: In theory aWOM effectiveness stems from its persuasive function, but previous studies focused on awareness generation. For example, aWOM has been shown to perform in low-awareness settings. Then even negative WOM seems more effective than none, suggesting marketers to sacrifice persuasiveness for reach. This contradicts aWOM's theoretical strength and limits knowledge to low-awareness, or low-risk products. Our study examines the sales effects of aWOM campaigns of mature fast moving consumer goods with data from several aWOM campaigns. The results shed light on how multiple conditions of marketing strategy interact with aWOM in their sales impact. We include a measure for in-sample differences between awareness and persuasion driven aWOM. Thereby, we demonstrate applicability of persuasion driven aWOM campaigns. Finally, aWOM effectiveness and efficiency levels are compared to traditional media spending, providing with insights and recommendations for managerial practice.

2 - Moderating Role of Credibility, Impact of Motivation, Social Relational Properties on eWOM Social Media

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Social media is not new anymore; it has evolved for users around the world into a web of brand-related-conversations. Consumers have compelling stories to share about their brand experiences, seek recommendations, and exchange product information on their social network. Before internet, and social media, brand-related-conversations or 'word-of-mouth' (WOM) was largely face to face between small groups of people. With the popularity of social media 'eword-of-mouth'(eWOM) emerge from interactions on social media, accessible to a much larger audience. Researchers have empirically found eWOM on social media to be capable of influencing, both, consumption related behavior and brand equity. Even marketers, with the help of technology, are closely monitoring eWOM to capture consumer sentiments and insights. Unlike traditional WOM, which mostly originated from known and trustworthy sources, eWOM may originate from sources where no significant prior relationship exists. Therefore the persuasiveness of eWOM towards consumption related behaviors is likely to be moderated by credibility perceptions consumers derive. Both source and message credibility is likely to play a role. Hence to understand the phenomenon better this research attempts to understand the precursors that lead to eWOM behavior on social media and how perceived credibility is likely to play a moderating role in its persuasiveness. Study is divided into two parts. Study I is a factorial design experiment that evaluates the moderating role of credibility towards brand attitude and purchase intention formation for an 'eWOM on social media' situation. Study II evaluates the motivation and social relational properties significant to eWOM behaviour on social media through survey method.

3 - The Why in Viral: Enhancers and Inhibitors of Deliberate and Selective Word-of-Mouth Transmission

Florian Dost, European University Viadrina, Grofle Scharrnstrafle 59, Frankfurt (Oder), 15230, Germany, Dost@europa-uni.de, Jens Sievert, Frank Jacob

Word-of-mouth (WOM) is considered to be a strong marketing force and it can potentially reach many consumers by (re-)transmission. Little however is known about why or why not people transmit WOM they have received. This exploratory study embraces a behavioral approach to WOM transmission–rather than a network approach–and is based on the individual transmitter, rather than the individual generator of WOM. Such a distinctive transmitter's perspective allows focusing on why WOM communication spreads and not simultaneously spawns. It furthermore enables to recognize selective WOM transmission behavior that would fail to utilize all potential network connections. After demonstrating that only retransmitted WOM drives market level brand interest, the enhancers and inhibitors for (a) the decision to engage in transmission, and (b) the selectiveness of subsequent transmission behavior are explored and assessed for their relative strength. For example congruent product perceptions and altruism enhance transmission towards many receivers, while e.g. an emotional reaction, enhances selective transmission towards only a few. Incongruent or negative product perceptions are examples for inhibitors of WOM transmission. Knowledge on these enhancers and inhibitors as well as their relative strength is particularly interesting to marketers who utilize WOM communication such as by amplified WOM, or viral campaigns, or as a side-effect of traditional marketing mix instruments.

4 - Predictors of Social Mobilization Speed

Chander Velu, Assitant Professor, University of Cambridge, Judge Business School, Trumpington Street, Cambridge, United Kingdom, c.velu@jbs.cam.ac.uk, Jeff Alstott, Stuart Madnick

Mobilization across social networks is becoming increasingly influential, but little is known about what traits of individuals and their relationships affect the speed of mobilization between them. We ran a global contest involving time-critical social mobilization in 2011 for Langley Castle Hotel in Northumberland, United Kingdom. We recorded personal traits of the participants and those they mobilized. The task was to find five knights in parks throughout the United Kingdom on a particular weekend. We examined how those traits influenced the speed of mobilization between the individuals. Individuals mobilized faster when they heard about the contest directly from the contest organization, and decreased in speed when hearing from sources less personally connected to the individual. Mobilization was faster when the mobilizer and the mobilized heard about the contest through the same type of source (e.g. email vs. social media), and slower when both individuals were in different countries. Females mobilized other females faster than males mobilized other males. Older individuals mobilized faster than younger individuals when recruited by others. However, older individuals produced slower mobilization when recruiting others. These findings suggest how to optimize the speed of social mobilization tasks through targeting the right elements of the social network which has implications for marketing related activities from advertising to product adoption.

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SC13	High-Tech and Service Marketing
SC14	Word-of-Mouth

A girl from Kansas and her dog

Wicked Witch

Tinman

Scarecrow

Cowardly Lion

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2013 INFORMS Marketing Science Conference Summary Schedule

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THURSDAY	7:30 - 8:30 AM	Continental Breakfast													
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THURSDAY	3 - 3.30 PM	Break													
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FRIDAY	7:30 - 8:30 AM	Continental Breakfast													
FRIDAY	FA 8:30 - 10:00 AM	Mobile and Social Networks	Online Advertising	Strategic Consumer & Firm Decisions 1	Optimal Pricing Decisions	Pricing in the Channel	Context Dependent Choices	Health Marketing I	Dynamic Pricing II	Ad Targeting and Shared Consumption	Branding and Consumer Behavior	Group and Context Effects in Choice Modeling	Decision Making	Finance and Marketing I: The Team	New Product Adoption
FRIDAY	10 - 10.30 AM	Break													
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FRIDAY	12:00 - 1.30 PM	Lunch													
FRIDAY	FC 1:30 - 3:00 PM	Social Networks & Social Influence I	Modeling Multichannel Performance	Strategic Consumer & Firm Decisions 3	Channels: Retail Competition	The Global Channel	Consumer Characteristics	Service Marketing	Price Competition II	Advertising Planning, Budgeting	Sales Force Integration	Bayesian Methods	Online Customer Response	Finance and Marketing III: Innovation	Innovation in Emerging Markets
FRIDAY	3 - 3.30 PM	Break													
FRIDAY	FD 3:30 - 5:00 PM	Social Networks & Social Influence II	Multichannel Marketing	Emerging Markets & Beyond	ISMS Doctoral Dissertation Proposal Award Winners	Channel Management	Consumer Decision Making	Customer Equity Through CRM	Advances in Pricing	Store Brand Power	Sales Force Performance Assessment	Conjoint Analysis	Auctions	Finance and Marketing IV: Time & Space	New Product Design
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SATURDAY	7.00 -1.30 PM	Registration													
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