

Beauty in a Digital World 2013 Capstone Research

Presented June 5 at the FIT Capstone Event, followed by forums in New York at Macy's and the HBA Global Expo, and in Las Vegas at Cosmoprof North America

The Fashion Institute of Technology's beauty industry think tank unveiled "disruptive" visions for the future of consumer product marketing in three key areas of the digital sphere when they presented *Beauty in a Digital World* at FIT on Wednesday, June 5. The presentation was also given to Macy's merchandising and marketing teams on June 13, at the HBA Global Expo on June 18 and 19, and at Cosmoprof North America on July 15. One of the major initiatives of the FIT master's program is to expand the availability of the students' research throughout the industry, where their research and ideas can be further explored and discussed in varying formats and include the involvement of leading experts, who join the students in panel presentations and discussions.

Capstone This year's capstone research was conducted in conjunction with Google, Inc., and with contributions from leading global digital technology and business experts, with the support of event sponsor, Beiersdorf North America. **Dr. Joyce F. Brown**, president of FIT, welcomed everyone to the event, followed by **Bill Graham**, general manager, North America,

Beiersdorf. Mr. Graham said, "Beiersdorf was honored to serve as this year's capstone sponsor for the FIT Cosmetics and Fragrance Marketing and Management graduate program. Not only did we celebrate the graduation of two of our company's brightest managers, we supported a one-of-a-kind program that promotes innovation and unprecedented collaboration within our highly competitive industry. Digital marketing is at the core of our brand campaigns. We look forward to implementing some of the great thinking and research findings to continue growing our brands." Following Graham's remarks, **Joe Rospars**, chief digital strategist for President Barack Obama's election and reelection campaign and founder/CEO of Blue State Digital, gave a keynote address, in which he spoke about the impact of digital marketing on the 2008 and 2012 Obama campaigns, and how those initiatives and learnings are critical for brands in today's marketplace.

The capstone co-leaders provided a digital level-setting introduction, followed by the digital analytics, digital marketing, and digital commerce team presentations. A conclusion of



Andrew Videria (Beiersdorf), digital marketing team, was the recipient of the Department Medal and the Limited Brands Student Leadership Award.



FIT capstone keynote speaker Joe Rospars, CEO, Blue State Digital, and chief digital strategist 2008/2012 Obama Presidential Campaigns

business imperatives was presented by the three capstone team leaders.

The awards ceremony began with the

continued on page 15

Selected Capstone Research Predictions:

1. Leveraging artificial intelligence, facial recognition, and predictive analytics technology will revolutionize the in-store experience by completely personalizing it.
2. Motion-activated technology will allow consumers to virtually browse aisles of products located anywhere in the world and make purchases directly from interactive screens in their homes.
3. "Beauty on Demand" will utilize image-, sound-, and video-capture technologies to allow consumers to shop for anything, anywhere – with just one click. The street becomes the new shopping mall.
4. Micro-targeting, enabled by data and technology, will allow

brands to create highly personalized communications.

The result, micro-engagement, will increase individual consumer lifetime value for brands.

5. ROL is the new ROI. Return on Learnings (ROL) will replace Return on Investments (ROI) as a new real-time metric to track and drive brand value.

6. Sensors will be molded into product packaging to track actual consumer usage behavior.

Note: Pages 4-14 of this issue contain reprints of the research white papers. To view the videos for this event, go to fitnyc.edu/5518.asp. To read past capstone presentations go to fitnyc.edu/20823.asp.

First Charitable Event Held at Soul Cycle to Benefit Girls Who Code

In Partnership with L'Oréal's Woman in Digital Initiative

On May 20, over 50 FIT alumni joined members of L'Oréal's Women in Digital to raise money for Girls Who Code, a national nonprofit organization working to educate, inspire, and equip high school girls with the skills and resources to pursue opportunities in computing fields. Alumni arrived at SoulCycle and embarked on a 45-minute intense cycling session. In advance of the May 20 event, all participants were encouraged to raise money for their ride.

At the evening's award ceremony, Alexandra Fritsch-Gil and Teril Turner, event leads for CAFAA, as well as Rachel Weiss, co-founder of L'Oréal Women in Digital, presented a check for \$25,000 to Girls Who Code. Reshma Saujani, founder, accepted the check and told a poignant story about one of the students in the program. "It's about leveraging the power of technology to change the world," Reshma said.

The alumni event with L'Oréal Women in Digital and Girls Who Code at SoulCycle marks the first charitable initiative for the association, capping its 2012-2013 academic year, themed "Year of Digital." ■



Charitable event VIP riders from left: Mariah Chase, Reshma Saujani, Rachel Weiss, Maya Mikhailov

CAFAA Presents Inaugural Alumni Achievement Award



Tennille Kopiasz

One of the CAFAA's main objectives is to highlight and acknowledge outstanding alumni. At this year's capstone presentations on June 5, the inaugural Alumni Achievement Award was presented to Tennille Kopiasz, senior vice president of marketing at Coty Prestige.

A 2004 graduate of the program, Tennille is a beauty marketing executive with experience across prestige, designer, and mass beauty brands. She has worked in both global and operational roles. She spent 16 years at L'Oréal prior to joining Coty and worked across the L'Oréal Paris, Ralph Lauren, Maybelline, and

Lancôme brands. As a graduate of both the bachelor's and master's cosmetics programs at FIT, Tennille has served the college as a graduate mentor to the undergraduate program, and as the Coty corporate member of the bachelor's program industry advisory board. Most important is her industry-wide reputation as a devoted mentor and inspiring team leader.

The award will carry an annual gift of \$10,000 to support the alumni association, which was funded this year by the master's program and will be sponsored by a different corporate partner in each year to follow. Coty graciously matched the master's program gift of \$10,000 for the 2012-2013 academic year.

To further implement CAFAA's efforts for long-term sustainability, the board worked with

the master's program's corporate partners to support an initiation fee paid by the employer, beginning with the class of 2013 graduates, for lifetime membership to the association. ■

The mission of the Cosmetics and Fragrance Alumni Association is the enrichment of its alumni, the program, and the industry it serves and a commitment to philanthropic efforts through charitable initiatives.

CAFAA EXECUTIVE BOARD

President: Carly Guerra (class of 2010),
The Estée Lauder Companies

Vice President: Stephanie Dishart-Kramer
(class of 2011), Chanel

Secretary: Renee Ordino (class of 2003),
Batallure Beauty

Treasurer: Frank Fronzo (class of 2008),
The Estée Lauder Companies

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2014: The Year of Engagement

Each year, the alumni association will adopt a new central theme around which all of its events will be focused. For the academic year 2012-2013, all events were focused on understanding how the ever-changing digital world impacts the beauty industry. These events culminated with this year's capstone presentations, whose theme was *Beauty in a Digital*

World. For the upcoming 2013-2014 academic year, CAFAA's programming will take the theme, "Year of Engagement." This theme was chosen based on input from CFMM alumni. Activities for the coming year will continue to offer professional development, networking opportunities, and charitable initiatives for all program alumni. ■

Digital Marketing Panel Moderated by *Wall Street Journal's* Ellen Byron

On Tuesday, March 15, over 75 alumni and students of the FIT Cosmetics and Fragrance Marketing and Management program gathered to listen to digital experts share their insights on social, mobile, e-commerce, multichannel selling, and digital strategy. Moderated by Ellen Byron of the *Wall Street Journal*, panelists included Erika Bearman, senior vice president, global communications, Oscar de la Renta; Mariah Chase, co-founder, sendthetrend.com; Stephanie Dishart-Kramer, executive director of marketing, Chanel; Maya Mikhailov, vice president and co-founder, GPShopper; and Matt Knell, social media director, AOL.

Erika Bearman, also known as Oscar PR Girl, talked about how she uses digital to connect with current and future consumers who shop across all of Oscar de la Renta's luxury categories. "Optimally, social media forges a bond with consumers beyond the product sales," she noted, concluding that it is the brand's objective to create a clear brand image for consumers, focusing on aspiration.

Aligning with the CAFAA's mission to promote its alumni, Stephanie Dishart-Kramer



From left: Maya Mikhailov, Mariah Chase, Matt Knell, Erika Bearman, Stephanie Dishart-Kramer, Ellen Byron

(class of 2011) discussed user-generated content, and noted that for a brand like Chanel, it is key to maintain aspirational brand images so that consumers will want to connect in an emotional way with the brand.

Matt Knell talked about the fact that various generations engage with digital platforms in different ways. Millennials are always connected, and are not afraid to share and be seen online. For some consumers, though, the pendulum has swung the other way, and silence and privacy are what they are craving.

He stressed that brands need to understand this and strategically decide when to engage with their consumers.

Maya Mikhailov and Mariah Chase discussed the mobile landscape and the impact of multichannel. "It is impossible to predict... but one clear trend is that the mobile screen will go beyond our mobile phones and tablets. Consumers are connected and are using their mobile devices in-store as the concept of 'showrooming' grows, as well as using them post-purchase to further validate their purchases." ■

FIT and Wharton Alumni Gain Digital Insights from Alice + Olivia Founder, Stacey Bendet

On Tuesday, June 11, FIT's master's program in collaboration with Wharton's Jay Baker Retailing Center, hosted an exclusive breakfast at the LVMH Magic Room for program graduates. Stacey Bendet, founder of Alice + Olivia, was the keynote speaker, interviewed by Professor Barbara Kahn, the director of the Baker Center. As the final event in the alumni's "Year of Digital" programming, Ms. Bendet's comments on brand and retail marketing were informed by her career start in web design.



Alumni speak with Stacey Bendet after her presentation.

Bendet is passionate about the digital space and personally manages the Alice + Olivia Instagram account. Using the hashtag #this-girls-life, she shares photos of her travels and everyday inspirations to engage with the consumer on a high touch and personal level.

Bendet discussed many aspects of her entrepreneurial career, including the importance of starting the brand with one item (perfectly tailored trousers), executed well, that editors could focus on. She also discussed the challenges of growing a small brand, while thinking ahead like a larger entity, and the pressure to grow infrastructure at the same pace as distribution, while also expanding overseas. For example, having sold at Lane Crawford in China for



From left: FIT's Stephan Kanlian introduces Baker Center Director Barbara Kahn and Alice + Olivia CEO Stacey Bendet.

many years, the brand's partners in China plan to open 20 stores in the next five years. "Every project and hire needs to be forward-looking," said Bendet, "to prepare for the future."

Bendet had advice for entrepreneurs: "Be an optimist, it's the one thing common to every successful brand. Even when you have failures, you have to look at it as a learning opportunity." ■

We are pleased to provide papers by the three capstone project teams summarizing their June 5 presentations. Downloadable versions of these papers can be found in the program's section of the FIT website: fitnyc.edu/cfmm. These papers are works of the graduating students, and any reproduction or use of this material requires their written permission.

Capstone 2013 White Paper **DIGITAL ANALYTICS**

Authors: Emily Coleman (L'Oréal), group leader; Jacqueline Chan (Coty Beauty), co-leader; Courtney Das (The Estée Lauder Companies); Eileen Kim (Chanel); Craig LaManna (Beiersdorf); Erica Roberson (Unilever); Lisa-Anne Sequino (The Estée Lauder Companies)

Future of Big Data and Beauty

Today, there are already pharmaceutical companies approved to manufacture pills which are able to track ingestion time, heart rate, temperature, and activity. In fact, in just the first half of last year, venture capital firms invested \$700 million in businesses developing wearable, edible, and implanted sensors (Kahn, 2013). Big Data is projected to be worth \$300 billion annually to the health care industry alone. It has become one of the leading topics in business today, and there are now more connected devices in the U.S. than there are people and by 2020, there will be 31 billion devices used by the 4 billion people connected to the Internet (Badcock, 2013, Figure 1). This explosion of devices has been termed "The Internet of Things" (Tyler, 2006, Figure 2).

The Internet of Things

In order to understand the Internet of Things, one must comprehend the true size and meaning of Big Data.

Size of Big Data: In 2012, the total amount of data created was enough to fill a stack of DVDs that could reach the moon and back. In 2013, the average person will process more data in a single day than a person in the 1500s did in an entire lifetime. In 2020, the amount of data the world's population generates will be 57 times the amount of sand on all of the beaches in the world (Tyler, 2006).

Meaning of Big Data: Big Data is defined on three dimensions: Velocity, Volume, and Variety (Kaushik, 2013). Data is generated faster than ever before and is so big that it has outgrown today's server technologies. These factors, along with data's increasing amounts of structured and unstructured formats, ultimately represent value. There is a reason that many "quantrepreneurs" say that Big Data is the new Oil (Kahn, 2013). By applying technology to data, businesses are expected to quickly derive insights to improve their bottom line and outpace the competition.

Beauty Product Launch 2020

To understand what Big Data means for the beauty industry, one can examine the potential impact through the Product Launch cycle of 2020. By 2020, Big Data will have an impact on each stage of the product development process. Data will bring value to beauty companies enabling cost savings, speed to market, and greater return on investments (Figure 5). The below addresses six specific ways Big Data will affect beauty innovation:

Data-Centric Focus Groups: Product experience is based on a range of cues that are not always conscious. However, we know the medical industry is using ingestible sensors to track patient's usage of medications. In the future, sensors are predicted to go beyond what people can verbally express and track what they physically do with the beauty product. Sensors will be molded into product packaging to track actual consumer usage behavior as companies develop and validate product concepts (Holmes, 2012). These sensors will allow brand marketers to understand where and how consumers are using products, as well as how much product and how often. For example, in a recent survey consumers claimed that they apply five strokes of mascara to each eye. But when counted during actual usage observation, it was closer to 50 ("Big Data issue," 2013).

Biology-Led Innovations: Biological factors affect a significant part of the way each human ages. All human beings carry genes that control these factors, but what differs is exactly which variants of them each person has. Today, the industry looks at skin health when assessing aging. In the future, sensors built into beauty devices will go deeper and capture biological information to understand specific aging needs of consumers. For each consumer, a brand can understand how he or she makes and retains collagen, how skin is protected, and how quickly it repairs from UV damage. After receiving the data from the sensors, the biological information will be put into a digital database pre-loaded with information about active ingredients and their effectiveness with these biological variations ("Delivering on-demand," 2012). Recommendations directly related to each individual's skin care requirements will determine which existing products will be the most effective or even allow the



Figure 1: How Big Is Big Data



Figure 2: The Internet of Things

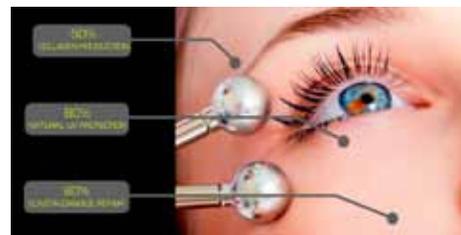


Figure 3: Sensor Intelligence

brand to create a specific product for that consumer ("How Big Data," Figure 3).

Data-Driven Innovation Choices

Delivering this innovation successfully is critical for high performing companies. However, only 8% of prestige beauty retail sales were from true innovations or newness in the marketplace (Ferber, 2013). By 2020 there will be new technologies that will allow brands to quickly aggregate Big Data across several macro factors including environment, natural resources, search analytics, consumer ratings and reviews, and consumer sentiment analysis. This information will enable companies to create virtual trending scenarios of the future, helping to identify gaps within product offerings ("Big Data issue," 2013). For example, in a virtual trending scenario, there is a prediction that employment rates will rise for women, despite a downturn in the economy. Social media sentiment reveals that working women are more stressed and have less time to dedicate to beauty rituals. They are choosing nail

accessories to treat themselves during this poor economy. Search analytics show that women are looking to update their look more often. Sales trends indicate strong growth predictions through 2025 in the nail category, outpacing total beauty, and product sensors have populated data of nail polish usage revealing women are beginning to change their nail look two to three times per week. By gaining these insights a nail company could identify an opportunity to create nail polish that updates instantly with a UV wand.

Data Stock Options: Big Data will also affect the future supply chain. Today, over \$800 billion in sales are lost annually due to inventory distribution challenges like out-of-stocks. For retailers, out-of-stocks lead to dissatisfied shoppers and for brands a lost sale to competition. Overstocks lead to heavy discounting or returns which not only negatively impact the brand profit but may also lead to diminished brand equity. In 2020, digital technologies will allow retailers and manufacturers to break down silos that exist in inventory management and provide full visibility across channels. Brands will be able to collaborate with retailers to ensure the right stock is available in the right place at the right time. This will enable real-time visibility, better planning, improved customer service levels, and, most importantly, shopper satisfaction (Lohr, 2011).

Sensor Intelligence: Data will improve executional elements as well. Adjacent industries are using radio-frequency electromagnetic fields, also known as RFID, to transfer data for the purposes of automatically identifying and tracking objects. Today, it is used to monitor the distribution of pharmaceuticals, assess food quality and temperature, and identify adverse reactions for hospital patients through implanted microchips. In 2020 there will be new ways to leverage this technology and integrate it with GPS and advanced data analytics. This will provide the manufacturer with real time information about the consumer, and, most importantly, where and how products are used (Gulbahace, 2010). For example, during a typical fragrance launch a beauty brand can spend an estimated 6% of projected retail sales on sampling. But the company is not always certain of the return it is getting on that investment. In 2020, this integrated tracking system will give businesses a way to capture data on where product was sampled, who received the sample, and if they enjoyed it enough to purchase.

This technology will also improve consumer experience. According to NPD, by 2015, one in six people will be over 65 years old, and 14%

more people will reach 100 years of age. As a result, the U.S. anti-aging market is projected to skyrocket to \$144 billion a year.

In the future, brands will leverage algorithms so consumers can receive specific recommendations to prevent or reduce aging (Grace, 2012). These algorithms will be based on three elements:

- 1) Intrinsic biometrics that detect skin health, moisture, collagen, and elastin levels.
- 2) Extrinsic measurements that capture pollution, UVA and UVB rays, and climate conditions.
- 3) Behavioral data that tracks behaviors that affect aging like stress, exercise, and sleep.

Once the technology captures this information, it will export a consumer's profile of skin health and suggest hyper-personalized product and behavior recommendations. It will then calculate an aging index score and project the consumers' future aging profile based on the three elements. With continuous data processing and regular input, the platform will empower the consumer with hyper-personalized recommendations to minimize the effects of aging.

From product innovation all the way to consumer relationship management, the future of Big Data and beauty looks quite promising.

Beauty & Data Today

While 2020 holds groundbreaking possibilities, Big Data can affect the beauty industry right now. Today, 93% of beauty organizations do not have a data-dedicated function (Meerman Scott, 2009). Data is often generated and disseminated within the sales and finance teams, instead of cross-pollinating across the company. To solve for this, companies should create data-centric beauty organizations. In this new data-centric organization, data is at the core. It feeds into and connects all elements of the company through a newly created function of data strategy. This new group receives data from all company sources including supply, finance, and sales. Data is analyzed and strategies are implemented across the company to affect everything from product development to execution (Figures 4, 5).

While the new data-focused organization will bring analytics across the company, finding data experts to lead these functions will be challenging. There are currently 40 universities in the U.S. with data science programs, and we predict that this will be the most popular major by 2020. However, at the same time, there will be a shortage of 200K data scientists in the workforce. Today, companies like American Express are buying smaller ana-



Figure 4: Data-Centric Organization

lytics companies to acquire talent in this area. The beauty industry needs to start recruiting, acquiring, and developing data scientists now ("Global powers of retailing," 2010).

Many companies have a large amount of data, however only 12% of marketing experts claim to have access to actionable data (Jones, 2012). In order to be effective, brands need to know what data to focus on, and what to push aside. They must start with the business objectives and eliminate irrelevant data to ensure that Big Data can go to work generating the desired results. For example, in 2010, a Singapore taxi company was looking to expand its customer base and increase taxi bookings. The company invested \$8 million in Big Data, ramping up its booking system and tracking its fleet of taxis through billions of data points including GPS, weather patterns, consumer usage, and traffic trends. In two years, the company tripled its revenue, increasing taxi bookings by 251% (O'Connor 2013).

Privacy is also a concern. Over 90% of internet users are worried about their privacy, and it is the top reason why non-users still avoid the internet. The current patchwork of privacy laws fails to provide comprehensive protection, which causes confusion, distrust, and skepticism. When it comes to preserving privacy, brands must invite consumers to share personal information in exchange for some type of value-add. Then, when speaking with them, brands must only use information which consumers have knowingly shared in order to build a loyal and trusting relationship (Homes, 2010).

Beyond privacy, it is difficult to know exactly who your target consumer is. You need to go deeper to understand them, as inaccurate personalization could lead to missed opportunities. For example, when the credit agencies undervalued the probability of failure in the U.S. housing markets in the mid-2000s, they based their assumptions on data pulled from housing statistics during the boom years. It was a recipe for egregiously wrong predictions, as there were many observations but no variance to show how the housing system would function under different conditions

(David, 2012). This mistake demonstrates the importance of testing. You must ensure that you are constantly testing with a control group to capture real time learnings and evolve your targeting.

Big Data is changing the beauty world as we know it. It is estimated to be worth \$300 billion a year to the health care industry alone, and the impact on the beauty industry is expected to be double (Heussner, 2010). Big Data will increase operating margins by 60% in the retail sector, and will save over \$150 billion in government spending through added efficiencies. The beauty industry must act today to capture the value that Big Data and associated analytics represent. If brands do not act on data now, they may not be ready in 2020 ("Big Data issue," 2013) (see Figure 5).

References

Accenture. (2008). Innovation in Consumer Products: How to achieve high performance through new product innovation. Retrieved from http://www.accenture.com/SiteCollectionDocuments/PDF/ConsumerProductsGroupPoV_103008_fnl.pdf.

Badcock, Corey (May 16, 2013). Infographic: How Much Data is Generated Every Minute? Retrieved May 21, 2013 from <http://www.exinda.com/blog/article/infographic-how-much-data-is-generated-every-minute>.

Census Bureau (March 9, 2006). Dramatic Changes in the U.S. Aging Population Highlighted in New Census, NIH report. Retrieved May 14, 2013 from <http://www.nia.nih.gov/newsroom/2006/03/dramatic-changes-us-aging-highlighted-new-census-nih-report>.

Crary, David (August 22, 2011) Boomers Will Be Spending Billions to Counter Aging. Retrieved May 14, 2013 <http://usatoday30.usatoday.com/news/health/story/health/story/2011/08/Anti-aging-industry-grows-with-boomer-demand/50087672/1>.

Cunningham, K. (2013). Showrooming and Inventory Challenges: An Infographic from Intel. Retrieved from <http://pointofsale.com/Point-of-Sale-Blog/Showrooming-and-Inventory-Challenges-An-Infographic-from-Intel.html>.

David Crary, (September 4, 2011). Antiaging Industry Booms for Baby Boomers. Retrieved May 11, 2013. <http://www.sfgate.com/business/article/Antiaging-industry-booms-for-Baby-Boomers-2311221.php#page-3>.

Data Science 101, Learning to be a Data Scientist (April 9, 2012). *Colleges with Data Science Degrees*. Retrieved April 19, 2014 from <http://data-science101.wordpress.com/2012/04/09/colleges-with-data-science-degrees/>.

EMC Corporation. (2012). *New Digital Universe Study Reveals Big Data Gap: Less Than 1% of World's Data is Analyzed; Less Than 20% is Protected*. Retrieved from <http://www.emc.com/>

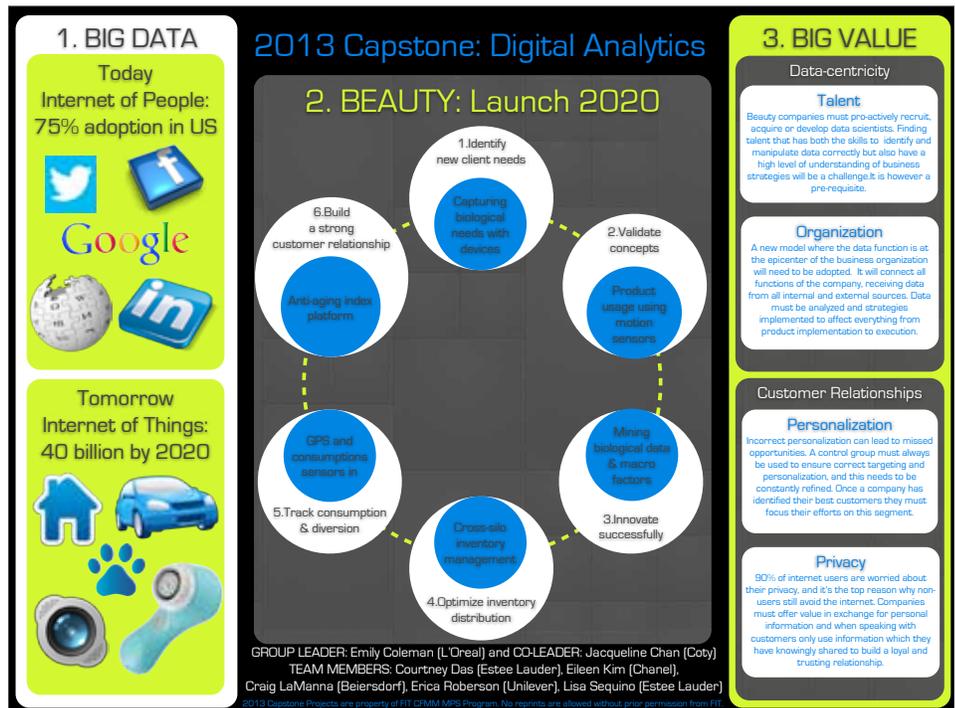


Figure 5: Beauty Launch 2020

about/news/press/2012/20121211-01.htm.

Ferber, Stefan (May 7, 2013). Harvard Business Review: How the Internet of Things Changes Everything. Retrieved May 12, 2013 http://blogs.hbr.org/cs/2013/05/how_the_internet_of_things_cha.html?cm_mmc=email-newsletter-technology-technology051313&referral=00208&utm_source=newsletter-technology&utm_medium=email&utm_campaign=technology051313.

Global powers of retailing 2013: Retail beyond. (2010, December). Retrieved from <http://www.deloitte.com>.

Gulbahace, Robert (2010). Born To Be Beautiful? Genomic Insights Into Healthy Skin. Australian Advanced Aesthetics. Retrieved May 13, 2013 from <http://www.skindna.com.au/>.

Heussner, Ki Mae (February 13, 2012). Divorcees, Southerners Most Concerned About Web Privacy. Retrieved May 11, 2013 from <http://www.adweek.com/news/technology/divorcees-southerners-most-concerned-about-web-privacy-138185>.

Holmes, Elizabeth (March, 20 2013). Makeup to Women: Apply Brandsrself. Wall Street Journal. Retrieved May 13, 2013 from <http://online.wsj.com/article/SB10001424127887323419104578372311872888312.html>.

How Big Data can predict brandsr divorce. *BrandsTube*. [Video podcast]. Retrieved from <http://www.brandstube.com/watch?v=DS310JMdu2s&feature=brandstu.be>. (2013). "Big data issue." *AdAge*, (March)

Intel and The Internet of Things Infographic. (2011) [Infographic illustration of The Internet of Things, August 23, 2011]. Intel created snapshot of how the number of connected devices has exploded since the Internet and PC. Retrieved

from <http://newsroom.intel.com/docs/DOC-2297>.

Jones, Sam and Kennedy, Maev (March 26, 2012). Ageing Population: More than a Third of Babies Born in 2012 will live to 100. Retrieved May 11, 2013 <http://www.guardian.co.uk/society/2012/mar/26/third-babies-2012-live-100>.

Kahn, H. (2013, May). Who really owns brands personal data? *Details*, 92-95. (n.d.). Retrieved from www.zeromomentoftruth.com.

Kaushik, A. (2013). Web analytics-an hour a day. New York: (2013). Big data issue – advertising analytics 2.0. *Harvard Business Review*, "Delivering on-demand analytics at the speed of thought." (2012, March 12). Retrieved from <http://www.cmo.com/content/cmo->

Landt, Jerry (2001). "Shrouds of Time: The history of RFID" (PDF). AIM, Inc. Retrieved May 23, 2013, from http://www.transcore.com/pdf/AIM%20shrouds_of_time.pdf.

Leake, Tim (May 7, 2013). Personal Lifecycle Management. *Digital Agency Day*. Lecture conducted from Dream Hotel, New York, NY.

Lohr, S. (2011, February). Big data is opening doors, but maybe too many. *Newsweek*, Grace, H. (2012). "The potential for omnichannel analytics, parts i, ii, iii." New York: RetailNext.

McKinsey Global Institute. (2011). *Big data: The next frontier for innovation competition, and productivity*. Seoul, San Francisco, London, and Washington D.C. Manyika, J., Chui, M., Brown, B., Bughin, J., Dobbs, R., Roxburgh, C., & Byers, A.H.

Meerman Scott, D. (2009). "Real-time marketing and pr: How to instantly engage brands market, connect with customers, and create products that grow brands business now." New York: John Wiley & Sons, Inc.

Miller, Claire Cain (April 11, 2013). *Data Science: The Numbers of our Lives*. Retrieved May 2, 2013, from <http://www.nytimes.com/2013/04/14/education/edlife/universities-offer-courses-in-a-hot-new-field-data-science.html>.

O’Conner, Mary Catherine, Ohio Boutique Takes a Unique Approach to RFID. *RFID Journal*. Retrieved on May 23, 2013 from <http://www.rfidjournal.com/articles/view?3688>.

Swedberg, Claire. (October 2, 2008). *Cosmetics and Liquor Companies Assess Toppan Printing’s Holographic RFID Labels*. Retrieved May 18, 2013. <http://www.rfidjournal.com/articles/view?4356/>.

The Beauty Company (2012). *Beauty Facts, Figures and Trends*. Retrieved from http://www.thebeautycompany.co/downloads/Beyer_BeautyNumbers.pdf.

The NPD Group. (2013). *More than 400 Million Devices are Connected in the U.S. Homes, According to The NPD Group*. Retrieved from <https://www.npd.com/wps/portal/npd/us/news/press-releases/more-than-400-million-devices-are-connected-in-us-homes-according-to-the-npd-group>.

Tyler, M. E. (2006). *Google analytics*. Indianapolis: Wiley Publishing. ■

Capstone 2013 White Paper **DIGITAL MARKETING**

Authors: Andrew Videira (Beiersdorf), group leader; Adrienne Davis (LVMH), co-leader; Ashley Boyce (Unilever); Alison Cifrese (Coty Prestige); Amanda Kahn (Coty Prestige); Janet Kim (Firmenich); Andrea Reichert (Firmenich)

Introduction

With the birth of advertising in the 1880s, beauty marketers practiced Marketing 1.0 – product-centric marketing with a mass approach to communication based on a “one to many” model for maximum efficiency (Kotler, P). Over the next 30 years, as more competition entered the marketplace, beauty marketers focused on building relevant, emotional connections between brands and consumers. This new form of marketing was an evolution and marked the dawning of Marketing 2.0. However, in both Marketing 1.0 and 2.0, marketers were talking at consumers not with them. Media channels available at the time never allowed anything beyond talking at consumers. Now, the dawning of the digital age has changed the “social contract between brands and consumers.” (Keller, A.) The expectation of the relationship between brands and people has become far more intimate. We have entered the age of Marketing 3.0 – the age of human-centric marketing. In this new marketing era, the goals of a marketer remain consistent – marketers must tell stories to create meaningful connections between brands and people (see Figure 1). What has changed in this new era are the significant amount of touch points, ease of access, and speed of action that marketers can utilize. In the era of Marketing 3.0, the lines between channels are blurring and the connectivity between brands and consumers is 24/7. As technology continues to evolve, communication touch points will be interactive, interconnected, zero-friction, and on-demand. To be effective, marketing can no longer be done in silos – marketing campaigns must tell stories across platforms, not just in them. This requires a new framework to help marketers continue to build brand affinity with

their consumers. Enter the m³ model.

m³ model

The m³ model is a framework to help marketers navigate the human-centric world of marketing 3.0. The model is defined as: **micro-Targeting + micro-Engagement = micro-Marketing** (see Figure 2).

micro-Targeting = using advanced predictive analytics to cultivate deep human understanding of individual consumers.

micro-Engagement = constant, on-demand, two-way communication between brands and consumers where and when consumers want it.

micro-Marketing = creating campaigns with the illusion of personalization that combine the learnings from micro-targeting with the continuous access of micro-engagement to serve up the right content to the right individual, at the right time (see Figure 3).

The m³ model helps brand marketers to more effectively communicate with consumers by leveraging new advances in technology and redefine success with new measurement indicators. To optimally structure a marketing organization to execute the m³ model, there must be changes within the marketing team and with its cross-functional partners. All teams involved in bringing the product to market and bringing the brand to life must commit to the model to reach success.

Evolution of Media

One of the consequences of the evolution of the digital landscape has been the change in what consumers expect from brands. Consumers expect brands to understand them, engage with them, and to reflect values that they can connect with on a personal level. This new, high level of interactivity and connectivity is made possible by advanced technology and the evolution of traditional media channels.

In the worlds of Marketing 1.0 and 2.0, brand communication was “one to many” – assets developed for generic target groups run on traditional, static channels. In Marketing



Figure 1



Figure 2

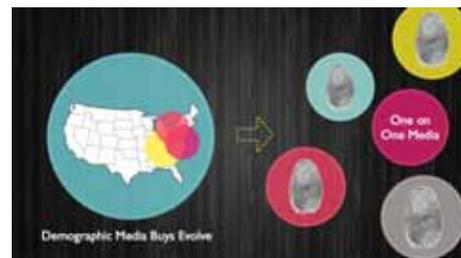


Figure 3

3.0, brands can engage in a “one to one” approach to communication with individual consumers in an on-demand, zero-friction environment through the use of advanced media platforms.

Successful brands in this environment will create flexible communication which responds and adjusts to consumer feedback in real time. This feedback is made possible by advanced analytics tools that collect and interpret the vast amounts of data that individual consumers generate within the digital space. Brands will have a deeper understanding of consumers that will allow them to predict the desires and aspiration of individuals. With this learning, enabled by new technology, brands can be both

predictive and reactive, delivering a humanized brand experience for their consumers.

The practice of **micro-Targeting** is the first step in executing these new experiences effectively. Using the data generated by consumers, brands can focus their strategies on individuals that are the most valuable for them. Additionally, data analytics will result in insights that can inform asset development and campaign strategy. From there, brands can use this data to help form their **micro-Engagement** strategies, and the new media touch points available to engage with consumers where they want, when they want, at the moments that matter most. Information gained from these engagements will be used to optimize future engagements in real time, resulting in communication that is increasingly effective at each consumer interaction. The evolution in media channels and technology makes **micro-Marketing** possible and will enable micro-Targeting and micro-Engagement tactics to result in effective micro-Marketing campaigns. In the era of Marketing 3.0, all media is interactive and personalized. There is no distinction between “digital channels” or “social media.” All media is digital and all channels are social. This is already beginning to happen with the evolution of smartphones and smart tablets. The critical shift for marketers is to ensure that their marketing campaigns can adapt to these new media opportunities, resulting in seamless, on-demand, personalized campaigns, increasing an individual consumer’s brand love and loyalty.

The shift from traditional to new media does not mean that traditional channels such as print and TV should be removed from marketing plans (Millward Brown). These traditional channels will also be part of the evolution of media and they too will become ‘smart,’ interconnected and interactive, collecting data and feedback on individual consumers that brands can leverage in their new campaigns. To achieve interactivity and personalization, brands will create ad templates with multiple versions for different consumer groups and, through the use of advanced algorithms, can create a seemingly personalized campaign, resulting in the right content delivered to the right individual every time (Whittlake, E.). Agencies like Media Mind are already beginning to make this a reality for marketers. However, to take communication to a micro-Marketing level, marketers will need to use advanced monitoring tools to collect data from consumer engagements across all touch points and quickly optimize assets for maximum effectiveness (see Figure 4).

In order to make m³ a reality, brands must brief their creative agencies differently, focusing on flexibility and adaptability. If flexibility is included in the briefing process from the beginning, these ad templates will not seem like a distant concept; instead, they will be an achievable reality. By incorporating the creative agency, the digital minds, and the analytical experts at the point of conception of the media campaign, it will ensure the creation of a fully integrated, completely seamless, entirely zero-friction campaign across multiple platforms.

Evolution of Measurement

The evolution of success measurement is critical in effectively executing the m³ framework into strategic brand management. In a world where marketing campaigns are constantly monitored and optimized in real time, success metrics must evolve to embrace this new mindset. Brand marketers must shift their focus away from traditional return on investment (ROI) metrics, such as reach, gross ratings points (GRPs), and click-through rate. These metrics are static and historical in nature, largely because the channels in which they were developed did not allow for real time optimization, only post-launch evaluation. In the m³ model, the new metric is Return on Learnings (ROL) (see Figure 5). This represents a major shift in marketing success measurement, and is a necessary next step to ensure successful marketing in the m³ model. It has been widely discussed by business experts and beauty industry leaders that marketing attribution enables stronger budget allocation and bigger returns (Google Analytics). Imagine if a brand could monetize the attribution path of a consumer to understand how each engagement works independently or together within the context of a plan to drive value for consumers. Soon you will no longer need to just imagine this, as this technology is in development already. To capitalize on this opportunity, brands need to reallocate resources to ensure a stronger focus on analytics to better work with the data they currently receive from consumers. Armed with information on where consumers are entering and exiting the selling model, marketers can change the way they do business (Fast Company). With this new ROL approach, and the necessary analytics tools to support it, marketers will be able to track unique consumer value over her lifetime and understand the most critical points that drive future sales at the individual consumer level (see Figure 6).

As a first step for today’s marketers, there

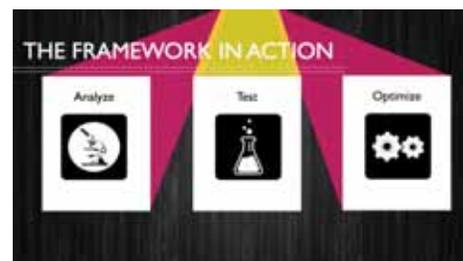


Figure 4

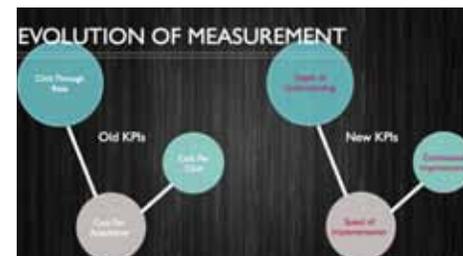


Figure 5



Figure 6

are several new Key Performance Indicators (KPIs) associated with ROL that need to be included in their success measurement plans. These include:

- Depth of understanding
- Continuous improvement
- Speed of implementation

These new ROL metrics should be monitored in real time, on an ongoing basis. Through specific data analytics programs, brands will be able to determine how these KPIs translate into retail sales (Blur Group). In the end, the ROL model is still focused on increasing sales, yet does so in a manner that is closer to the consumer than the traditional ROI model and therefore results in greater lifetime value – a more important KPI.

Evolution of Management

To maximize the execution of the m³ framework, organizations must develop three capabilities within their management and human resources structure to ensure success:

- Talent
- Marketing culture
- New business units

Talent: First and foremost, organizations must hire the right talent. As Kevin Kells

of Google states, in Marketing 1.0 and 2.0, marketers were hired based on their capability to be “both good general managers and good brand builders.” At that point in history, the capabilities required to do both jobs were relatively similar. The standard marketer was a businessperson with a “jack of all trades” mentality and an eye for creativity. This is no longer enough in the era of human-centric marketing. For marketers to embrace micro-Marketing and Return on Learnings, they need to evolve as well. Furthermore, it is increasingly unlikely that the capabilities required of a good brand builder would be found in one individual alone (CMO.com). Rather, these capabilities are found in multiple individuals who have specialized areas of expertise. As a result, the new model recommends organizations create m³ marketing teams comprised of individuals with the following capabilities:

- **Communications Experts** – Brand marketers who own the essence of the brand and help drive brand strategy via smart channel marketing and execution choices.
- **Content Craftsmen** – Individuals with backgrounds in content publishing that have experience in community management and journalism.
- **Data Analytics** – These are professionals who aid in mining insights via micro-Targeting tools and analysis (Godin, S.).

Currently, many brands already have experts with these capabilities on their teams; however, it is very likely that these individuals are employed by partner organizations, such as PR agencies, social listening partners, and creative agencies, and are not on the internal brand team. It is recommended that beauty marketing organizations bring these capabilities in-house. This also requires beauty organizations to update their traditional marketing job descriptions and rethink the skills required of a marketing professional compared with those of an effective businessperson/qualified general manager – individuals still critical to business success.

Marketing Culture: For this new talent pool to successfully execute the m³ framework, organizations need to embrace a new marketing mindset. Given the nature of the beauty business, the cultural mentality can sometimes be risk averse, with a focus on ensuring perfection across all areas of the business. The risk of a mistake in the production of beauty products has grave consequences in the context of a consumer’s health and well-being. If this culture permeates the m³ function, m³ marketers will not be able to do their jobs effectively. m³ marketing requires that organizations embrace

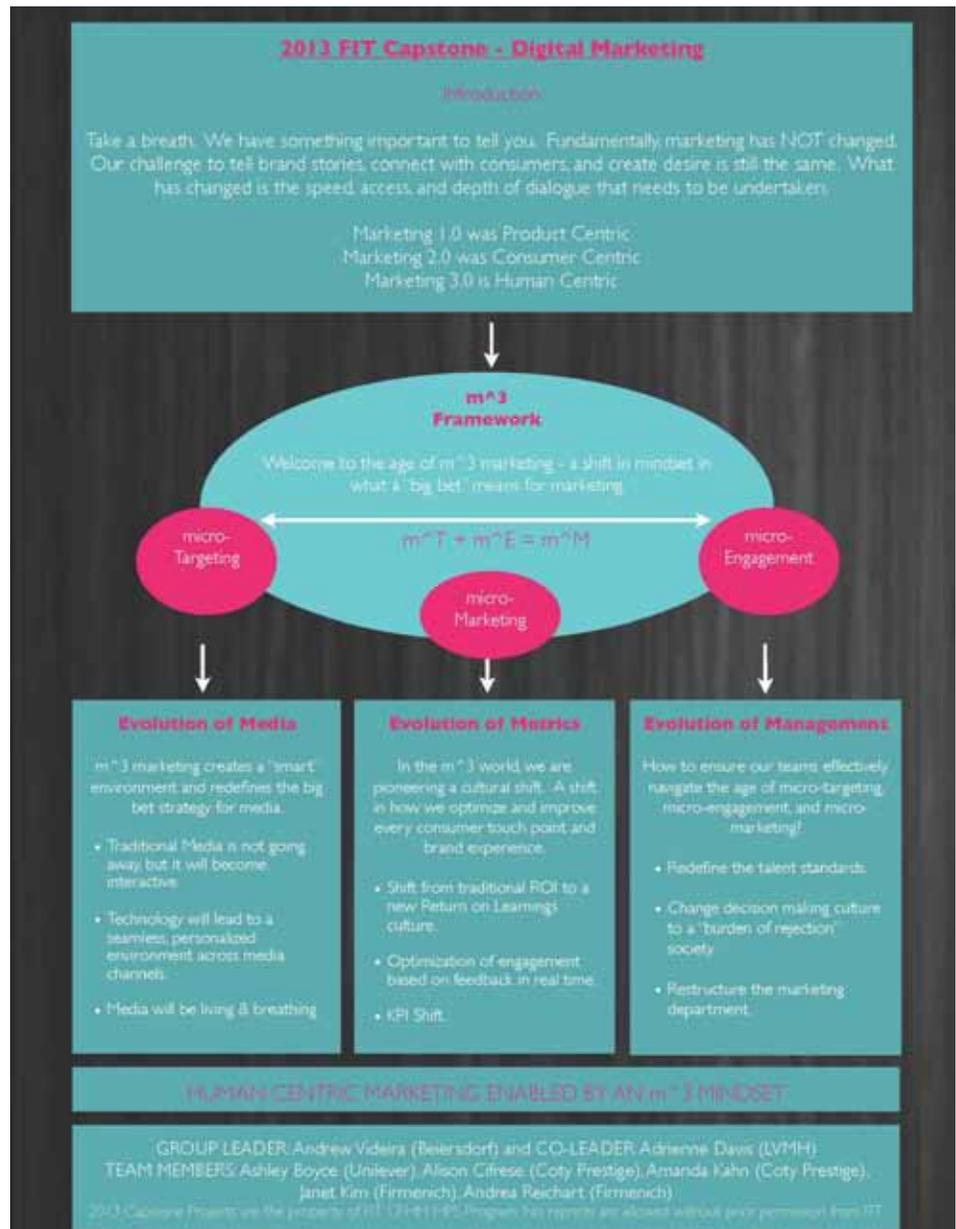


Figure 7

a new set of values to cultivate a functioning m³ hub. These include:

- **Speed of reactivity to consumers** – With constant feedback and monitoring in the m³ framework, the level of consumer understanding a brand will have for their consumer will be significantly deeper than today. This level of understanding minimizes the risk in executing new ideas with speed and increases the likelihood of success.
- **Learnings** – High value must be placed in improving communication via learnings through ideation, iteration, and optimization.
- **Experimentation** – Organizations must be comfortable with experimenting in new media, new channels, and new ideas.
- **Decision Making Culture** – A shift from a

“burden of approval” to a “burden of rejection culture” must be embraced.

This last criteria, the decision making culture, requires each team member to understand their individual role and responsibility. In the m³ model, marketers move forward with decisions quickly unless they hear a rejection from a key decision maker, instead of waiting for approval. This is a significant step-change, but will result in far more successful marketing given today’s fast-paced world. By embracing these values, the organization will be prepared to embrace the m³ model internally.

Organizational Structure: To ensure that m³ marketers are able to effectively do their jobs in this new mindset without impacting other functions, such as product development

or operations which require a more risk averse culture, organizations may need to consider some internal restructuring. Given the risks associated with a rapid-response model in the health and beauty category, it is recommended to separate product development and business management – two critical functions – from the new m³ marketing group. Organizations should create separate “hubs” of expertise, each with a clear specialty. As long as each hub adheres to the values and standards set forth by management for their hub in this m³ model, each group will be working towards the same goal (Google Research Studies). Communication should flow freely between the m³ marketing group and these other hubs (product development, operations, etc.) to facilitate learning and to maximize the success of each hub of expertise. In this new structure, the integrity of the business comes first; once the m³ model and mindset are embraced by the organization, anything is possible.

Conclusion

In the era of Marketing 3.0, marketers must continue to act as constant storytellers across the never-ending number of touch points that exist between brands and their consumers. They must tell these stories seamlessly, across multiple platforms. Using the new m³ framework, brand marketers can micro-Target, micro-Engage, and micro-Market to the consumer to more effectively communicate with her and redefine the meaning of success. To ensure the optimal level of success, marketers must make changes on all fronts of their business. Media must evolve from a “one to many” press conference style to a “one to one” friendly conversation where advertising has the illusion of personalization. Measurement KPIs must move into the world of Marketing 3.0 and shift from the traditional ROI (Return on Investment) to the more modern and flexible

ROL (Return on Learnings). And management must also make changes – developing their talent, marketing culture, and organizational structure to successfully fit within the m³ framework. With the m³ framework in mind, marketers can approach the era of Marketing 3.0 with their eyes wide open and the knowledge that they are moving their business towards the future, and doing so with a model that will set them up for success (see Figure 7).

References

- A Brief History on Modern Advertising. <http://mootee.typepad.com/innovation-playground/2008/11/a-quick-history-on-modern-advertising-if-you-thin-mass-advertising-build-brands-think-again.html>.
- Kotler, P. (2010). *Marketing 3.0: From Products to Consumers to the Human Spirit*. New Jersey: John Wiley & Sons.
- Keller, Andrew. (October 2012). Brand Building in a Digital Age with Andrew Keller. Google | Think Insights. Retrieved from <http://www.google.com/think/articles/brand-new-with-andrew-keller.html>.
- Meyer, R. (2013, January 4). Marketing 3.0. Slideshare. Retrieved from <http://www.slideshare.net/rmeyer52/marketing-30-15859492>.
- (October 2012). Digital & Media Predictions 2013 Millward Brown’s Global Futures Group Brings You the Hottest Trends For the New Year. Retrieved from <http://www.millwardbrown.com/ChangingChannels/2012/Predictions/>.
- Whittlake, E. (March 2013). Are Machines the Future of Marketing? B2B Digital Marketing. Retrieved from <http://b2bdigital.net/2013/03/14/are-machines-the-future-of-marketing/>
- Kee, Bill. (April 2012). Marketing Attribution: Valuing the Customer Journey. Google | Think Insights. Retrieved from <http://www.google.com/think/research-studies/marketing-attribution-valuing-the-customer-journey.html>
- Cram, Jeff. (January 2013). Will Marketers Make 2013 the Year of Optimization? Fast Company. Retrieved from <http://www.fastcompany.com/3004365/will-marketers-make-2013-year-optimization>
- (June 2012). Slide Show: The CMO’s World in 2020. Retrieved from <http://www.cmo.com/slideshows/slide-show-the-cmos-world-in-2020.html>
- Tonya. (March 2012). 5 Social Media Marketing KPIs You Cannot Afford To Ignore. Retrieved from <http://blurgroup.com/blog/2012/02/03/5-social-media-marketing-kpis-you-cannot-afford-to-ignore/>.
- Hardaway, Francine. (May 2013). Cost Per Whatever: Has Ad Tech Crippled Advertising?. Fast Company. Retrieved from <http://www.fastcompany.com/3009816/cost-per-whatever-has-ad-tech-crippled-advertising>.
- (September 2012). Why Marketing Leaders Outperform. IBM Center for Applied Insights. Retrieved from <http://public.dhe.ibm.com/common/ssi/ecm/en/swel4003usen/SWE14003USEN.PDF>.
- (August 2012). Welcome to the Era of the Chief Executive Consumer. IBM Center for Applied Insights. Retrieved from http://www.ibm.com/smarterplanet/global/files/us_en_us_marketing_ibm_smarter_marketing_chief_executive_customer.pdf.
- Godin, S. (May 2009). Is Marketing an Art or a Science? Retrieved from http://sethgodin.typepad.com/seths_blog/2009/05/is-marketing-an-art-or-a-science.html.
- (February 2013). Wildfire Marketing Report: The Road to Social ROI. Google | Think Insights. Retrieved from <http://www.google.com/think/research-studies/wildfire-social-marketing-strategies-report.html>.

Interviews/Personal Discussions

- Yahel Carmon, Blue State Digital, Deputy Director of Analytics
- Sarah Cooper, Coty Prestige, Manager, Global Media
- Danielle DeMarco, Chanel, Director, E-Commerce Marketing
- Andrea DiPasquale, Coty Prestige, Director, CK One Color Global Marketing
- Kevin Kells, Google, National Industry Director, Consumer Packaged Goods
- Tim Leake, Hyper Island, Global Creative Innovation & Partnership Director
- David Rubin, Unilever, Vice President, U.S. Hair
- Emmie Salaj, Bvlgari, Vice President, U.S. Sales ■

Capstone 2013 White Paper DIGITAL COMMERCE

Authors: Katherine Voyten (P&G Prestige), group leader; Lauren Edelman (Chanel), co-leader; Nichole DiNunzio (VSB); Alexandra Hardymont (The Estée Lauder Companies); Lauren Hirschbach (Shiseido); Carlos Omana (LVMH); Allison Robl (L’Oréal)

Introduction

The beauty industry today is very focused on commercial transactions in the traditional brick and mortar channel with 95% of sales in the U.S. taking place in physical stores.

Consumers, however, have shifted the way they shop in this new digital age. They do not want brick and mortar to be treated as a separate channel from the online world and expect to get the best of both of these environments wherever they are. Consumers also expect to find whatever they are looking for easily, but the beauty industry still makes them work too hard to get what they want. There is a huge opportunity to leverage technological capabilities to help consumers have better commercial experiences wherever they shop. Only 5% of

beauty sales take place in the e-commerce channel (see Figure 1), but other categories have much higher penetration: toys and games 13.9%, consumer electronics 13.1%, consumer appliances 10.2%, and apparel at 6.3% (“Emergence of S Commerce,” 2013, 60). This highlights a significant under-index in online sales for the beauty industry, which also means a missed opportunity to capture more consumers and grow industry sales overall.

This is happening for two reasons. First, beauty is an experiential category and consum-

er-product interaction is essential in the path to purchase. This paper will highlight opportunities to use digital technology to enhance the consumer experience in all channels. Secondly, brands and retailers are not leveraging existing technology to enhance or create new purchase opportunities. This paper will also explain how both the current brick and mortar and online retail channels will need to evolve to keep up with consumers' growing demands, and how a new model of commerce creates opportunities for consumers to transact anywhere and for brands to sell everywhere.

Infinite Commerce Model

In the current state, the online and offline channels are not seamless or frictionless, although brands are beginning to use technology to close the gap. Online and offline began as two separate commercial environments. Over time, these two worlds have moved closer together. Some brands have been successful bringing high-tech elements from the online world into brick and mortar. Other retailers have successfully elevated service by bringing high-touch elements from in-store into the online environment. However, it is still not the seamless experience consumers are seeking. 89% of consumers feel retailers should enable them to shop in whatever way is most convenient and 49% of consumers feel the best thing a retailer can do to improve the shopping experience is to be more seamless between the physical stores, online, and mobile channels (Samuel, 2013).

Consumers have become very comfortable in a complex environment of omni-channel retailing, where technology enables 24/7 access to products, education, and service. A new model of commerce must incorporate the three key drivers that define our interactions with consumers at every touch point: convenience, curation, and customization. The consumer expects a consistent brand experience across all channels. Therefore, it is up to brands and retailers to implement an Infinite Commerce model (see Figure 2), introducing high-touch experiences to the online environment and incorporating digital elements that add value to the in-store experience. Implementing the Infinite Commerce model requires operational and organizational changes from brands and retailers to improve the consumer experience. Consumers will be able to snap a picture of any object and purchase it directly. Image, sound, or video recognition technology locates the product. And the brand ships the product directly to the consumer. The end result of this implementation is that the consumer will

experience "Beauty on Demand."

This new model, Infinite Commerce, conveys a continuous cycle of commerce. It addresses the key desires of consumers, utilizes technology to create commercial opportunities everywhere, and allows consumers to opt in for high-touch experiences when needed.

In-store: High-touch Experience

Brick and mortar locations will continue to be a dominant retail channel for the beauty industry, but in order to grow, they will need to evolve. They should introduce meaningful digital technology to the in-store environment and evolve the format of the in-store channel with the end goal of creating a more customized, enjoyable experience that encourages increased consumer engagement and interaction with beauty.

Julie Bornstein, CMO of Sephora has said, "The key is to figure out where technology can add to the physical experience, rather than focusing on just the appeal of an iPad sitting in a store (that wears off quickly)" (Bornstein, 2013). Retailers and brands must bring high-tech to the offline channel to elevate the consumer experience by guaranteeing the most appropriate selection, encouraging discovery and ultimately driving more sales.

Facial recognition and predictive analytics technology will revolutionize the in-store experience. Installations at counter will recognize and synthesize your consumer profile, based on publicly accessible information. It can then recommend products that will work for a consumer's unique beauty needs. As a result, each virtual beauty advisor consultation can be customized and will never start from square one. Layering meaningful digital technology to augment the in-store environment is just the beginning of transforming the in-store experience.

The next phase of the evolution of the physical beauty retailer will be the introduction of new, smaller-format boutiques. These boutiques can be located as freestanding stores or can pop up within other locations like hotels and airports. Proximity will continue to be a crucial factor, as 75% of all purchases are made within 15 miles of consumers' homes (Joyce, 2012). Consumers are beginning to see the big-box store format as impersonal and overwhelming and there has been a return to "shopping small" with an emergence of localized boutiques. Consumers have always felt their relationship with retailers needs to be genuine and personal and are looking to establish stronger relationships where they shop (Yarrow, 2012). Macy's and Walmart

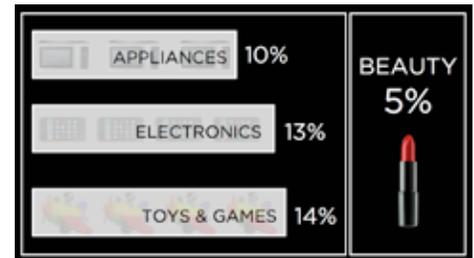


Figure 1

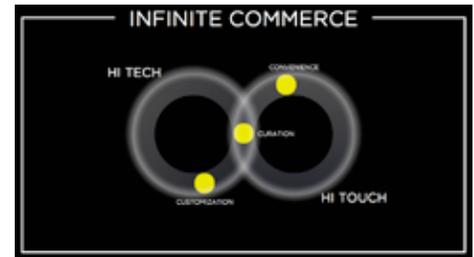


Figure 2

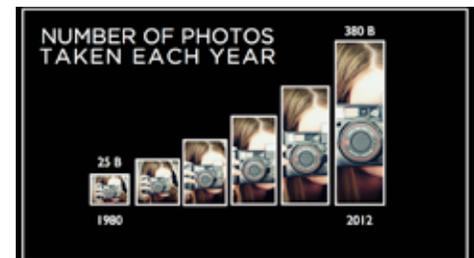


Figure 3

have already begun to capitalize on this trend and have introduced smaller, more localized initiatives, through My Macy's and Walmart Express. My Macy's directs consumers to the best location based on their ZIP code and products they are looking for to make the hunt for something specific easier ("My Macy's Shop Ahead," 2013). Walmart Express is the smaller store format now being offered by the biggest of the big-box retailers, to allow consumers more localized, convenient access, still at its signature everyday low prices ("New Walmart Express Store Opens in Princeton," 2013).

The product assortment and services offered in smaller format boutiques will be customized to the clientele so the selection will vary according to location. Digitally enabling stores will make this possible. Merchandise can be selected and ordered based on local community demographics and shopping habits. The stores will all have WiFi and will be enabled with Geofencing technology, which "works by defining a virtual boundary around a real-world geographical area. In doing so, a radius of interest is established that can trigger an action in a geo-enabled phone or other portable electronic device" ("Geofencing," 2013). As consumers shop their personal mobile devices will be synced with the store's database, allow-

ing the staff to immediately understand their interests and needs, thereby providing the appropriate products. Consumers will discover and explore new product and service offerings which will inspire incremental purchases they may not have located in traditional big-box formats.

Another key to the evolution of the physical store environment is leveraging artificial intelligence technological capabilities, which can be combined with advancements in facial recognition tools in-store. This will produce an elevated and curated offline shopping experience because retailers will have more relevant information than ever before. The evolution of traditional brick and mortar to a more localized and curated approach to retail will further enhance the consumer shopping experience, leading to increased sales.

Online: High-tech Experience

The online channel is lagging behind brick and mortar in beauty sales because it does not replicate the high-touch experience of the in-store environment. Today, the online beauty commercial environment is very flat with static pictures of products and few tools to help consumers make purchase decisions. The high-touch experience, which is essential to beauty, is nonexistent because consumers do not have the ability to experiment with products and get the same level of service that is provided in stores.

The toys and games category enjoys one of the highest penetrations of online sales in the U.S. at 13.9%, so it is an interesting industry to watch for digital innovation ("Emergence of S Commerce," 2013, 60). Video gaming, in particular, is a category that was once very static and flat within the home entertainment category. With various systems striving to offer gamers better experiences through their television sets, Xbox revolutionized the video gaming industry with the introduction of Kinect, which allows the player to be the controller, physically inserting the player into the gaming experience. This same concept will be replicated in the future of beauty e-commerce.

By the end of 2013, an estimated 29.3% of U.S. households will have a TV connected to the internet through either an internet-enabled smart TV, game-console, or other device ("Demographics," 2013). Penetration is on the rise too as it is projected that by 2016, 43.1% of U.S. households will have a TV connected to the internet. The tools to experience beauty in a high-touch format already exist in consumers' homes and are on the rise.

The online retail environment will replicate

the high-touch store environment through an interactive screen experience. Motion-activated technology will allow consumers to literally browse aisles of products and make selections for purchase directly from the screen. Brands and retailers will have the opportunity to use this platform to invite consumers to experience their best and most unique stores. It introduces a new type of exploration for two reasons. Consumer interaction with products will evolve into an environment that replicates the engaging layout of a store as well as the opportunity to enjoy "entering" and experiencing far-flung boutiques such as the Chanel flagship in Paris or the new Sephora flagship in Shanghai.

The evolved online experience will be powered by Google Now's natural language user interface, which can answer questions, make recommendations, and perform actions by delegating requests to a set of web services. Content is selected based on the consumer's preferences or online behaviors. Consumers' online and offline shopping experience becomes seamless as the use of predictive analytic technology and artificial intelligence creates a customized in-store shopping experience and fuels a curated environment that lives both in physical retailers and online.

This is an example of how it will work: the consumer has booked a weekend getaway and Google Now utilizes information about the destination to recommend sunscreen and travel sizes of her favorite products. These products are aggregated into a single basket and delivered directly to the consumer's home. They will arrive on the same day because immediate delivery is an emerging consumer expectation and Walmart, Amazon, and Ebay are now piloting same-day shipping services (Wohlsen, 2013, 118-123).

To fully engage the consumer with a high-touch online experience, the service elements will be improved as beauty advisors will be available 24/7 to answer product questions or provide advice. Today, online retail growth is driven by women, many of whom are resorting to this channel because they do not have time to visit physical stores. "The 24/7 access provided by the internet certainly is appealing for busy parents, especially since they may not also have time to shop at brick and mortar stores due to the constraints of normal business hours" ("Beauty Online," 2012, 34). Bringing the high-touch experience to consumers online will enable greater conversion. It frees the consumer to browse brands beyond the regular hours of a physical store and lessens concerns about a desired product being out of stock.

Using technology to blend the high-touch



Figure 4

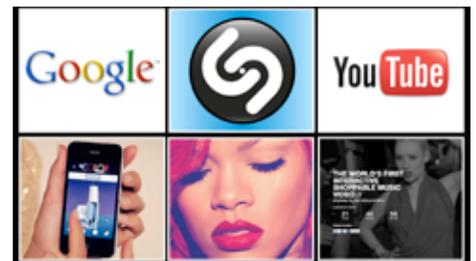


Figure 5



Figure 6

experiences of the offline with high-tech elements of the online is crucial to evolve beauty commerce to be truly seamless for the consumer. The two main commerce channels of brick and mortar and online retail must evolve to keep up with consumers' increased expectations and demands.

Beauty on Demand

Beauty on Demand is the commercial opportunity that will be the future of the beauty industry. The consumer is empowered to purchase anywhere utilizing mobile devices, and brands are enabled to sell everywhere. The new digital world and mobile devices are already having a significant impact on commerce. By 2015, 50% of retail sales will be influenced by digital (Liebmann, 2013). Consumers are beginning to adopt mobile for commerce; 35% of smartphone users have purchased a product or service on their smartphone ("Our Mobile Planet," 2012, 30). Therefore, the next step is to enable consumers to purchase what they capture in pictures and audio clips, allowing brands to take advantage of infinite opportunities for commerce. Consumers are already armed with the tools to make this possible. Smartphone penetration is on the rise in the United States: increas-

ing from 31% of device users in 2011 to 44% in 2012 (“Our Mobile Planet,” 2012, 6). 80% of smartphone users do not leave their home without their device (“Our Mobile Planet,” 2012, 6).

By the end of 2013, there will be more mobile devices on Earth than people (Murphy, 2013). There are 6.8 billion people on the planet and 5.1 billion (75%) own a cell phone (Edmund, 2012). This number is sharply on the rise too as by 2020 it is projected that there will be 20 billion internet-connected mobile devices globally (“Beauty Online,” 2012, 7). Increased consumer connectivity is part of the foundation on which Beauty on Demand is built.

Between 1980 and 2012, the number of photos taken annually increased from 25 billion to 380 billion (see figures 3 and 4) fueled by the omnipresence of smartphones (Schwarz, 2012). Connected consumers are also addicted to sharing, with 90% of online users accessing social sites (“Emergence of S Commerce,” 2013, 14). There is an opportunity for brands and retailers to commercialize this consumer behavior while satisfying an unmet desire to be able to purchase anything in the consumer’s environment.

Beauty on Demand exposes brands to billions of new Points of Sale (POS). Technology exists to enable transactions between consumers and brands and connected mobile devices are already in the hands of billions of consumers. Google is a leader in visual image recognition and color-matching technology, but it is currently being utilized only to improve search capabilities. Shazam is a leader in audio recognition, yet the app is only commercialized for music. YouTube is leading the way in shoppable video content, although very few consumers or brands are using this platform (see Figure 6). Technology already exists to identify objects through images, sounds, and videos, but no one has commercialized this opportunity. The beauty industry should be the first to capitalize on this technology.

The next step will be to create the connection between the image or sound and a product, and to provide consumers with the opportunity to truly purchase anything. All brand assets, such as the physical products or TV and print advertising, will need to be coded so that visual and audio recognition tools can identify the item and allow consumers to purchase directly. Today, QR codes have been utilized to provide consumers with more product information, but they generally are not designed to close a purchase. They re-direct consumers to a brand website, where the consumer typically

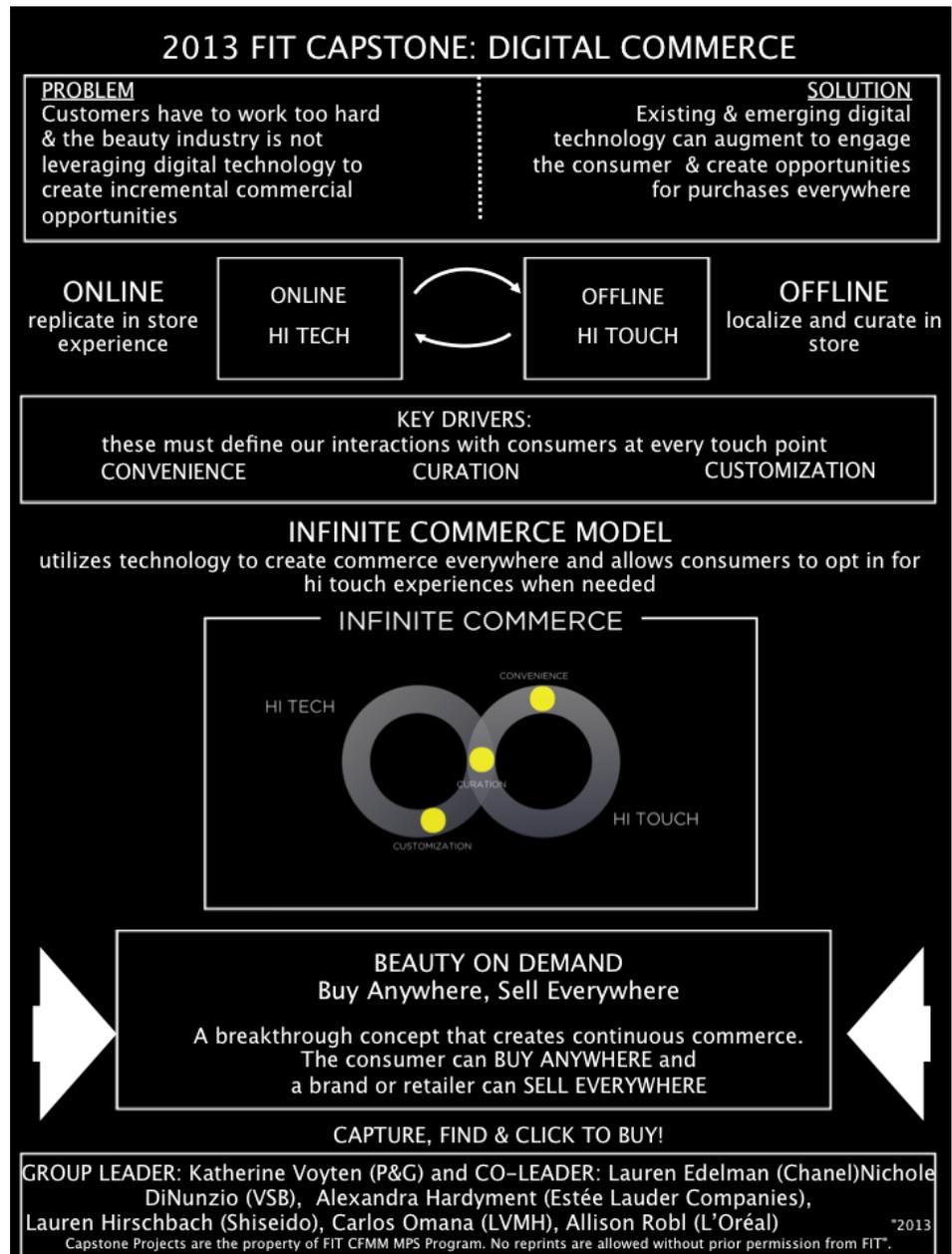


Figure 7

needs to click through multiple screens on her path to purchase. This inefficiency leads to dropped baskets and lost sales. According to Baymard Institute, 67% of e-commerce carts are abandoned (“19 Cart Abandonment Rate Statistics,” 2013).

The final step for brands, retailers, or both will be to figure out how to ship product quickly and directly to the consumer (see Figure 5). Today, the distribution model confines the ability to sell a product to traditional retailers who can hold and manage inventory. In the future, brands will remain in control of their inventory but will need to be able to ship orders to consumers who purchase off of anything. After a consumer clicks to make a purchase, the order is transmitted directly to the brand. To ship

these orders efficiently brands should partner with a fulfillment expert. Beauty on Demand recognizes that fast and free shipping will be a point of parity.

The future of beauty commerce will be a new consumer network of brand ambassadors, who serve as affiliates through whom brands fulfill directly to consumers. In essence, the street becomes the future shopping mall. When this happens, consumers become retailers as friends or strangers identify and purchase what they are wearing on the street with a snap of their smartphone. Bloggers become retailers when consumers purchase products straight from their blogs. Publishers become retailers by linking items that editors review. With a touch of a button, consumers can truly

have Beauty on Demand by purchasing anything they see in their daily environment. This is the future of Infinite Commerce.

Conclusion and Recommendations

Infinite Commerce is a world where consumers are in charge, empowered by digital technology to transact wherever they choose and where they are both brand ambassadors and new points of sale. The best aspects of the online and in-store environments cross over creating a seamless shopping experience.

Implementing the Infinite Commerce model requires operational and organizational changes from brands and retailers. To do this, we recommend brands invest in technology to deliver convenience, curation, and customization. If these operational and technical capabilities are not part of the brand's core competencies, leverage experts in these fields.

- For convenience, invest in infrastructure and technology to provide excellent customer service and rapid delivery directly to the consumer, or partner with capability experts such as Amazon or Ebay for order fulfillment.
- For customization, in the short-term, enable consumers to shop where they want to shop; and in the long-term, enter into partnerships with technology experts such as Google, Shazam, and Youtube.
- For curation, become a content generator, giving the consumer richer content accessible through mobile.

The real breakthrough of the future and what drives Infinite Commerce is the ability of consumers to buy anywhere, and for brands to sell everywhere. The future does not depend on improving just the in-store experience or just the online retailer. The future of beauty commerce is integrating both so that the high-tech capabilities of the online environment are maximized offline, while the high-touch elements so important to the brick and mortar retailer are now incorporated online. The Infinite Commerce model, which creates the ability to buy and sell online, offline, and anywhere in-between, will bring these worlds together. This new world of Beauty on Demand creates a powerful commercial opportunity for the future of the beauty industry (see Figure 7).

References

Beauty Online. U.S. (2012, December). Mintel.
Ben-Shabat, Hana and Gada, Kosha (2012). Beauty and the E-Commerce Beast. *AT Kearny*.
Bornstein, Julie. (2013, May 21). Sephora CMO Debunks A Major Stereotype About Women And Tech. *Business Insider.com*. Retrieved from <http://www.businessinsider.com/sephora-cmo->

on-women-and-tech-2013-5#ixzz2UWPq7MaK.

19 Cart Abandonment Rate Statistics (2013, April). Baymard Institute. Retrieved from <http://baymard.com/lists/cart-abandonment-rate>.

Demographics. (2013, April 30). *New Media Trend Watch.com*. Retrieved from <http://www.newmediatrendwatch.com/markets-by-country/17-usa/123-demographics?showall=1>.

Edmund, Eric (2012, March 28). SEO & PPC: The Comprehensive Starting Points for Driving Mobile Traffic. *Search Engine Watch.com*. Retrieved from <http://searchenginewatch.com/article/2164106/SEO-PPC-The-Comprehensive-Starting-Points-for-Driving-Mobile-Traffic>.

Emergence of S Commerce and Impact on Consumer Goods Industries (2013, April). *Euromonitor International*.

Geofencing (2013). *Techopedia.com*. Retrieved from <http://www.techopedia.com/definition/14937/geofencing>.

Joyce, Gretchen. (2012, March 12). Going Local: Why Brands and Retailers Need to Get Serious in 2012. *Retail Info Systems News.com*. Retrieved from <http://risnews.edgl.com/retail-trends/Going-Local-Why-Brands-and-Retailers-Need-to-Get-Serious-in-201279132>

<http://newsroom.accenture.com/news/accenture-study-shows-us-consumers-want-a-seamless-shopping-experience-across-store-online-and-mobile-that-many-retailers-are-struggling-to-deliver.htm>.

Liebmann, Wendy. (2013, May 14) WSL Strategic Retail Presentation.

The Mobile Consumer: A Global Snapshot. *Nielsen*. February 2013.

Murphy, Samantha (2013, February 6). Mobile Devices Will Outnumber People by the End of the Year. *Mashable.com*. Retrieved from <http://mashable.com/2013/02/06/mobile-growth/>.

My Macy's Shop Ahead. (2013) Macy's.com. Retrieved from www1.macys.com/campaign/om/mymacys.jsp.

The New Digital Role in Shopping. (2012, September 19) Center for Media Research. New Walmart Express Store Opens in Princeton (2013, April 18). *Walmart.com*. Retrieved from <http://news.walmart.com/news-archive/2013/05/06/new-walmart-express-store-opens-in-princeton>.

Our Mobile Planet: United States. Understanding the Mobile Consumer (2012, March). *Google*.

Retailers Encroach on the Payment Landscape (2013, May). *Euromonitor International*.

Samuel, Matt (2013, April 15). Accenture Study Shows U.S. Consumers Want a Seamless Shopping Experience Across Store, Online and Mobile that Many Retailers are Struggling to Deliver. *Accenture.com*. Retrieved from <http://newsroom.accenture.com/news/accenture-study-shows-us-consumers-want-a-seamless-shopping-experience-across-store-online-and-mobile-that-many-retailers-are-struggling-to-deliver.htm>.

Schwarz, Hunter (2012, September 24). How Many Photos Have Been Taken Ever? *Buzzfeed.com*. Retrieved from <http://www.buzzfeed.com/hunterschwarz/how-many-photos-have-been-taken-ever-6zgv>.

Wong, Philip. (2011, July 8). Report: 500 Million Web-Enabled TVs by 2015. *Cnet.com*. Retrieved from http://news.cnet.com/8301-17938_105-20078036-1/report-500-million-web-enabled-tvs-by-2015/.

Yarrow, Kit (2012, September 4). Why a Good Return Policy Is So Important for Retailers. *Time.com*. Retrieved from <http://business.time.com/2012/09/04/why-a-good-return-policy-is-so-important-for-retailers/>.

Wolsen, Marcus (2013, April). Faster Than Overnight. *Wired*. 111 - 123.

Industry Experts Interviewed:

Anzo, Alexis, Google
Armendinger, Erin SVP Customer Engagement, Nomi
Barson, Donna, Kline & Company
Benhamou, Marc, Owner, 360 Creative
Bloch, Doreen, Poshly.com
Carbon, Yahel, Blue State Digital
Chang, Hana, Google
Chase, Mariah, Co-founder, Send-the-Trend
Collin, Guthrie, Amazon.com
Flatley, Kaitlyn, Senior Digital Analyst, Chanel
Ghossaini, Zahia, Digital Analyst, Chanel
Gutierrez, Andres, Teen Vogue, Executive Development Director, Beauty
Homlish, Caroline, Digital E-commerce, Chanel
Jureidini, Serge, AKI Inc.
Karmon, Yahel, Blue State Digital
Kangas, Deanna, SGC President at Strategic Growth Consulting
Kasper, Jennifer, GVP, Digital/New Media & Multicultural Marketing at Macy's
Kells, Kevin, Google
Kristo, Nathalie, SVP Marketing, L'Oréal Paris, L'Oréal USA
Liebmann, Wendy, CEO & Chief Shopper, WSL Strategic Retail
Madan, Nikhil, Google
Marie, Heather, 72Lux, Founder
Martin, Tad, Collectivei
McEniry, Dennis, President, ELC Online, Estée Lauder Companies
McDonald, Camille, BBW, President, Brand Development
Megasko, Molli and Gregory Baratte, Chanel
Pirie, Neil A., American Express
Preis, Elizabeth, Estée Lauder
Prouvé, Cedric, Group President, International, Estée Lauder Companies
Ray, Allison Slater, Consultant
Ricci, Robert, Marina Maher Communications
Roman, Jon, Vice President, ELC Online, Estée Lauder Companies
Ruddy, Lauren, Teen Vogue, Senior Marketing Manager
Shah, Khushbu, Google
Speichert, Marc, CMO, L'Oréal USA
Vitali, Cheryl Kiehls
Wagner, Meredith, Relationship Manager, Home & Personal Care, Google ■

FIT 2013 Capstone

continued from page 1

Alumni Association's "Year of Digital" event recap, presented by **Carly Guerra**, The Estée Lauder Companies, and **Stephanie Dishart-Kramer**, Chanel. They announced the first

annual Alumni Achievement Award, which was presented to **Tennille Kopiasz**, senior vice president of marketing, Coty Prestige (refer to article on page 2 for more details). **Mary E. Davis** shared her thoughts on the program, having completed her first year as dean of FIT's School of Graduate Studies, and

announced that **Brooke Carlson** had received tenure, and that **Stephan Kanlian** was promoted to full professor. The Outstanding Scholar award was presented to **Emily Coleman**, assistant vice president, interactive marketing, Lancôme. Ms. Coleman was also honored

continued on page 16

MACY'S, INC.

On June 13, Andrew Videira (Beiersdorf), Jacqueline Chan (Coty), Lauren Edelman (Chanel), accompanied by FIT's Brooke Carlson and Dean Mary E. Davis, presented their team's capstone research at Macy's to Muriel Gonzalez, executive vice president and general manager, Nancy Schmidt, group vice president and divisional merchandise manager, as well as 60 merchandisers and marketers. "The capstone presentation and ideas presented by the FIT students were truly inspiring and thought provoking. The presentation captured the fast-approaching future of beauty in a digital world and showed us the possibilities that exist to revolutionize and personalize the in-store and online shopping experience," Ms. Schmidt told *Women's Wear Daily*. ■

From left: Nancy Schmidt and Muriel Gonzalez, Macy's, with FIT class of 2013's Lauren Edelman, Jacqueline Chan, and Andrew Videira



HBA GLOBAL EXPO

The capstone research was presented in three separate sessions at the HBA Global Expo in New York City on June 18 and 19, where two graduates from each capstone team were joined by industry experts in panel discussions. Ashley Boyce (Unilever), and Andrew Videira (Beiersdorf), shared their team's digital marketing research, and were joined by Jeanine Shao Collins, executive vice president/chief innovation officer, Meredith 360, and Kevin Kells, national industry director, consumer packaged goods, Google, in a panel discussion moderated by Robert Ricci, chief of digital and social media strategy, Marina Maher Communications. Emily Coleman (Lancôme), and Erica Roberson (Unilever), presented their team's digital analytics research, and were joined by Sarah Newhall, executive vice president and director of analytics, Blue State Digital, and Elizabeth Preis, vice president, customer strategy, The Estée Lauder Companies, in a panel discussion moderated by Kristine Welker, chief revenue officer, Hearst



From left: Andrew Videira, Ashley Boyce, Robert Ricci, Jeanine Shao Collins, Kevin Kells

Digital Media. Lauren Edelman (Chanel), and Alexandra Hardymont (The Estée Lauder Companies), shared their team's digital commerce research, and were joined by Mariah Chase, co-founder, sendthetrend.com and Hana Chang, emerging business lead, Google Commerce, in a panel discussion moderated by Jenny Fine, editor in chief, Beauty, Inc., WWD. All three panels included in-depth discussions around the capstone team's proposed new business models, predictions, and business imperatives. ■

COSMOPROF LAS VEGAS

Capstone research was further shared at the Cosmoprof Las Vegas trade event, held July 13-15, where over 26,000 people were in attendance. Katherine Voyten (P&G Prestige), shared her team's digital commerce research in a panel entitled "The Next Phase of Online Marketing: The Smartphone Mobile Platform," and was joined by Erica Evans, vice president, HSN, and Maya Mikhailov, vice president and co-founder, GPSshopper, in a panel discussion moderated by Belissa Silva, beauty editor, WWD. Andrew Videira (Beiersdorf), shared his team's digital marketing research, and was joined by Herschel Thompson, vice president, marketing, and Stuart Bogarty, chief marketing officer, YouBeauty.com, in a panel moderated by FIT's Brooke Carlson entitled "Developing a Successful Online Strategy." Both panels suggested smartphone and online digital marketing tactics. Dean Mary E. Davis was also in attendance on behalf of FIT's School of Graduate Studies. ■



From left: Kate Voyten, Maya Mikhailov, Erica Evans and Belissa Silva

Leadership in Action

FIT 2013 Capstone

continued from page 15

for achieving a perfect 4.0 GPA, along with **Andrew Videira** (Beiersdorf) and **Alison Robl** (L'Oréal USA). Additional scholarship recognition awards were given to: **Ashley Boyce** (Unilever); **Jacqueline Chan** (Coty Beauty); **Lauren Edelman** (Chanel); **Alexandra Hardyment** (The Estée Lauder Companies); **Lauren Hirschbach** (Shiseido); **Amanda Kahn** (Coty Prestige); **Andrea Reichert** (Firmenich); and **Katherine Voyten** (P&G Prestige). The Estée Lauder Companies Faculty Leadership Award was presented to **Mary Tumolo** by **Jane Hudis**, the brand's global president. The Department Medal and the Limited Brands Student Leadership Award were both presented to **Andrew Vidéria** (Beiersdorf) for his outstanding leadership throughout the program. The event concluded with a reception honoring the class of 2013. ■



Class of 2013 gain insights at Google's headquarters in Japan as part of their Asia field studies course and capstone research. The trip also included visits to Shanghai and Singapore, a newly added market.



Professor Mary Tumolo receives The Estée Lauder Companies' Faculty Leadership Award from the brand's global president Jane Hudis.



Dr. Brooke Carlson presents the Outstanding Scholar Award to Emily Coleman (Lancôme).



From left: Bill Graham (Beiersdorf), Dr. Mary E. Davis (FIT), Kevin Kells (Google), Joe Rospars (Blue State Digital), Stephan Kanlian (FIT)

Career Milestones for FIT Master's Program Chair, Professor Stephan Kanlian, and Assistant Professor, Dr. Brooke Carlson



Dr. Brooke Carlson, who joined the program's faculty in August 2010, was granted tenure by the college in June, pending confirmation by the FIT Trustees this Fall. "Dr. B" teaches courses in marketing, leadership, corporate finance, consumer behavior, retail management and international business practices and received The Estée Lauder Companies Faculty Award in 2011. The department's chairperson, Professor Stephan Kanlian, was elevated to the rank of full professor, effective August 2013, having achieved tenure in 2002, and promotion to associate professor

in 2007. Professor Kanlian joined FIT in 1999, and was the recipient of the SUNY Chancellor's Award for Excellence in Teaching in 2007. ■

FIT Master's Program Contact Information

CHAIRPERSON

Professor Stephan Kanlian
stephan_kanlian@fitnyc.edu
(212) 217-4306

ASSISTANT PROFESSOR

Dr. Brooke Carlson
brooke_carlson@fitnyc.edu
(212) 217-4252

INDUSTRY/PROGRAM COORDINATOR

Ewa Garbos
ewa_garbos@fitnyc.edu
(212) 217-4311