University of Rhode Island

DigitalCommons@URI

Open Access Dissertations

2014

ESSAYS ON SOCIAL MEDIA AND BRANDING

Gema Vinuales University of Rhode Island, gvinuales@towson.edu

Follow this and additional works at: https://digitalcommons.uri.edu/oa_diss

Terms of Use

All rights reserved under copyright.

Recommended Citation

Vinuales, Gema, "ESSAYS ON SOCIAL MEDIA AND BRANDING" (2014). *Open Access Dissertations*. Paper 250.

https://digitalcommons.uri.edu/oa_diss/250

This Dissertation is brought to you by the University of Rhode Island. It has been accepted for inclusion in Open Access Dissertations by an authorized administrator of DigitalCommons@URI. For more information, please contact digitalcommons-group@uri.edu. For permission to reuse copyrighted content, contact the author directly.

ESSAYS ON SOCIAL MEDIA AND BRANDING

BY

GEMA VINUALES

A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

IN

BUSINESS ADMINISTRATION

UNIVERSITY OF RHODE ISLAND

2014

DOCTOR OF PHILOSOPHY DISSERTATION

OF

GEMA VINUALES

APPROVED:

Dissertation Committee:

Major Professor Daniel A. Sheinin

Deborah E. Rosen

Norbert Mundorf

Nasser H. Zawia DEAN OF THE GRADUATE SCHOOL

ABSTRACT

Social media have changed the way individuals interact with each other, with corporations and with brands; and thus, the context for brand management.

Recognizing the potential of social media to reach massive audiences, brands have become more "social" and embraced the new media; however, many are still struggling to effectively harness their potential. Research has aimed to offer some insights into the emerging social media challenges and have established some differentiated streams of research that serve as a general framework for these dissertation manuscripts. Specifically, we identify WOM communications, online reviews, media channels comparisons, online community influence, and co-creation as research areas within the social media literature.

The two manuscripts in this dissertation investigate distinct aspects of social media and contribute to the emerging literature in the field. Manuscript I contributes to the evolving "Media channel comparisons" stream of research by investigating the diagnosticity of traditional and social media channels. Manuscript II expands the current social media research framework to the visual communication context. Specifically, it investigates how visuals characteristics and the responses they generate (i.e. 'shares') influence brand interpretation.

A current challenge is to understand how media channel influences consumer's judgments about brands. The first manuscript addresses this research gap and explores the diagnosticty of traditional media versus social media as a function of corporate message type. In two studies, we show that social media are more diagnostic than

traditional media in forming attitudes and intentions towards corporate brands, independently of corporate message type. Media credibility is identified as the driver of these results. On the other hand, we find that social and traditional media are not distinctively diagnostic in forming beliefs about corporate brands. Changes in brand beliefs are dependent on the content of a message but independent from the communication channel.

Another challenge is to understand how users interpret images in social media and make judgments about brands. In three studies in the second manuscript, we show that social media users integrate associations from multiple images when making sense of a brand. The weight given to each image when integrating multiple visual stimuli varies as a function of the online community opinion. That is, the interpretation of a brand is anchored on the most popular image in the social media profile.

ACKNOWLEDGMENTS

I would like to thank the University of Rhode Island, the College of Business Administration, and the University of Rhode Island Transportation Center for this incredible journey. I would like to express my gratitude to the Marketing and Supply Chain Management faculty. Thank you Ruby Dholakia and Nik Dholakia for starting what I finish up today. Thank you Hillary Leonard, Douglas Hales and Steve Atlas for sharing this enjoyable journey with me. Thank you Albert Della Bitta, Norbert Mundorf and Wayne Velicer for assisting as dissertation committee members. Thank you all for your guidance, friendly advice, and support.

Special thanks to Daniel Sheinin and Deborah Rosen. Thank you, Dan for your support with this dissertation, for not giving up when nothing worked, for celebrating when something did. Thank you for your advice, for knowing that you would respond at 10 pm at night. Thank you Deb because I can't imagine these 7 years at URI without you. Because I could count on you, because you are the go-to person, because I look at you when I do not know what to do. THANK YOU.

Thank you to my family. Thank you all for believing in me, because I know that you are there when I need you.

PREFACE

This dissertation follows the Manuscript Format. It is written as two separate manuscripts that explore research questions at the intersection of social media and branding.

The first manuscript - Media Channel Diagnosticity: Does Social Media Make
Me Like Corporate Brands Better? - investigates how different communication
channels (social media versus traditional media) influence the formation of
consumer's attitudes, intentions and beliefs about corporations.

The second manuscript - Visual Social Media and Image Associations Transfer to the Brand - investigates how consumers process visual information in social media and make judgments about brands.

TABLE OF CONTENTS

ABSTRACT	ii
ACKNOWLEDGMENTS	iv
PREFACE	V
TABLE OF CONTENTS	Vi
LIST OF TABLES	ix
LIST OF FIGURES	x
INTRODUCTION	1
Social media literature review	2
Dissertation manuscripts in the context of the social media research framewo	ork7
References	9
MANUSCRIPT – I	15
Abstract	16
Introduction	16
Conceptual framework	20
Communication channels	20
Corporate associations: Corporate ability (CA) and corporate social resp	· -
Source effects and message type	
Method	
Study 1	28
Design and sample	28
Pretest	
Procedure and stimuli	30
Measures	31

Results	34
Discussion	38
Study 2	39
Design and sample	39
Pretest	39
Procedure and stimuli	41
Measures	41
Results	42
Discussion	46
Discussion, limitations, and ideas for future research	47
References	49
MANUSCRIPT – II	56
Abstract	57
Introduction	57
Conceptual framework	61
Visual communication	61
Museums, exhibitions, and curators	62
Social nature of museum visiting	65
Self-construal	66
Method	68
Pretests	68
Pretest 1: Image identification	68
Pretest 2: Testing associations with selected images. Sophistication versus	70
ruggedness.	
Study 1	
Design and sample	72
P 1 10: 1:	
Procedure and Stimuli	
Procedure and Stimuli	

Discussion	77
Study 2	
Design and sample	
Procedure and stimuli	79
Measures	
Results	
Discussion	85
Study 3	
Design and sample	
Pretest	
Procedure and stimuli	
Measures	
Results	90
Discussion	93
Discussion, limitations, and	ideas for future research93
References	96
APPENDIX 1	103
Study 1 stimuli	103
Study 2 stimuli	105
APPENDIX 2	108
Study 1 stimuli	108
Study 2 stimuli	109
Study 3 stimuli	112

LIST OF TABLES

Table 1. Media channels differences	22
Table 2. CA and CSR associations summary description	25
Table 3. Images based on personality traits	69
Table 4. Study 2 design	80

LIST OF FIGURES

Figure 1. Social media research framework.	2
Figure 2. Manuscript 1 Contribution to the Social Media Literature	7
Figure 3. Manuscript 2 Contribution to the Social Media Literature	8
Figure 4. Mediation model	37
Figure 5. Images. Sophisticated & Upper Class and Rugged & Tough conditions	70
Figure 6. Word clouds. Bow tie versus Trailer truck personality associations	71
Figure 7. Cognitive responses. Bow tie, Trailer Truck, and Bow tie-Trailer truck	
associations	75
Figure 8. Experimental condition interpretation.	80

INTRODUCTION

Social media have changed the way individuals interact with each other, with corporations and with brands, and are ubiquitous and embedded in consumer's daily routines. In 2013 about 1.7 billion people worldwide accessed a social media site. In 2014 the number of worldwide social network users is predicted to reach almost 2 billion. That is, social media reach nearly one in four people in the world (eMarketer 2013), and it is a major Internet destination. In the U.S., Internet users spend between 20 and 30% of their time online on social networks (Nielsen 2012). Recognizing the potential of social media to reach massive audiences, brands have become more "social" and embraced the new media. Harvard Business Review Analytic Services found that 79% of a sample of 2,100 organizations were using or planning to use social media in 2012; however, many are still struggling to effectively harness the power of the new media and integrate them in their marketing strategies.

In the last few years, researchers have aimed to offer some insights into the emerging marketing social media challenges, advance knowledge, and provide some guidelines for corporate practice. Although social media can still be considered an underresearched field of study, the emerging but rapidly evolving social media literature has established some differentiated streams of research that serve as a general framework for these dissertation manuscripts.

Social media literature review

The social media streams of research can be categorized as follows: 1) WOM; 2) cocreation; 3) media channel comparisons; 4) online reviews; and 5) community influence (see Figure 1).



Figure 1. Social media research framework.

The phenomenon of word-of-mouth communication (WOM) has been extensively researched in the marketing literature; however, traditional face-to-face WOM theory does not flawlessly transfer to the online context (Brown, Broderick and Lee 2007; Berger and Iyengar 2013). The literature in social media has conceptualized and compared WOM communications in online and offline contexts (Brown, Broderick and Lee 2007) and explored the effect of WOM marketing in online communities (Kozinets, de Valck, Wojnicki and Wilner 2010) as it compares to traditional marketing (Trusov, Bucklin and Pauwels 2009). The WOM stream of research has sought to understand the

information diffusion process in online social networks based on member's networks of connections (Katona, Zubcsek and Sarvary 2011), and member and content characteristics (Liu-Thompkins and Rogerson 2012). Taking a psychological approach to understanding diffusion, Berger and Milkman (2012) show that content that evokes high-arousal emotions is more viral. However, in the promotional context, the success of viral marketing messages is moderated by product type (Schulze, Schöler and Skiera 2014), and attitude towards the advertisement and the brand (Huang, Su, Zhou and Liu 2013).

Diffusion processes are enhanced by identifying influential users in Internet social networks. McQuarrie, Miller and Phillips (2013) show that, in the online context, some ordinary consumers are able to acquire huge audiences and highly influence their opinions. The highly-valued content that these members generate help explain their social networks' growth (Dwyer 2007). Given the managerial importance to identify these online community members, Trusov, Bodapati and Bucklin (2010) develop a model that help identify opinion leaders. On average, only twenty percent of a member's connections influence his/her activity level on the site.

A second stream of research within the social media context is online reviews. The information consumers discuss online is widely available in the public domain and becomes a valuable source of information for the Internet community (Chen, Liu and Zhang 2012). Research has explored how online consumer reviews evolve (Chen, Fay and Wang 2011), how much they can be trusted (Pan and Chiou 2011) and how valuable they are in forecasting sales (Dellarocas, Zhang and Awad 2007). Research shows that the valence of an online review has a differential effect on WOM (Chen, Wang and Xie 2011; Chen, Liu and Zhang 2012; Chen and Lurie 2013), and influences attitudes and

intentions (Purnawirawan, De Pelsmacker and Dens 2012), beliefs (Chen and Lurie 2013), purchase intent (Park and Lee 2009; Chen and Lurie 2013), conversion rates (Ludwig, de Ruyter, Friedman, Brüggen, Wetzels and Pfann 2013), and sales (Dhar and Chang 2009).

In addition, online reviews have been shown to affect firms' financial performance and investors' decisions. Luo, Raithel and Wiles (2013) show that the variance of brand ratings affects stock prices and argue that brand dispersion ratings should be consider a critical brand management metric. Social tags, user-generated keywords that help categorize online content, are proxy measures for brand performance. Nam and Kannan (2014) find that social tags can predict the financial value of a firm and can explain unanticipated stock returns. In addition, Chen, Liu and Zhang (2012) show that third-party product reviews are leading indicators of product sales and influence investors' expectations about a product's potential.

The third social media stream of research is co-creation. This stream explores the value of collaborative user-generated content (Ransbotham, Kane and Lurie 2012) and how it affects consumer perceptions, intentions (Hautz, Füller, Hutter and Thürridl 2014), and persuasion (Thompson and Malaviya 2013), as well as how it differs across social media channels (Smith, Fischer and Yongjian 2012).

Social media channels are known to differentially influence consumers. The fourth category of social media research explores how it compares to traditional media. Media channel shapes the message and the types of information consumers discuss (Berger and Iyengar 2013). Not surprisingly, Schweidel and Moe (2014) show that brand-sentiment metrics are dependent on the channel online conversations are monitored, and argue that

aggregated data across online channels may lead to mislead inferences. Understanding how media channels compare and complement each other has become critical for marketing communications success. Research in this domain has shown that on Internet social network sites WOM referrals have longer carryover effects than traditional marketing (Trusov, Bucklin and Pauwels 2009), and that media channel influences sales (Stephen and Galack 2012) and advertising effectiveness (Danaher and Dagger 2013). Research advocates for creating media synergies since it facilitates content exploration (Goldenberg, Oestreicher-Singer and Reichman 2012) and drives activity in complementary media (Stephen and Galack 2012).

Lastly, social media research has investigated the formation of online communities, their influence on individual member's behavior, and their potential for marketing and brands. Ansari, Koenigsberg and Stahl (2011) develop a framework to model relationship formation that helps predict community members' interaction levels. The size of these online communities has been shown to influence what people share (Barasch and Berger 2014), as well as brand-related outcomes such as brand affect and loyalty (Scarpi 2010). In addition, the strength of the relationships among members affects consumer behavior. Wilcox and Stephen (2013) find that social network users who focus on close friends while browsing the site have heightened self-esteem feelings but decreased levels of self-control that affect consumer choice and ultimately well-being. Brands are increasingly joining social network sites, becoming regular community members, and interacting with consumers across the new media. Social media allows for consumer-brand relationships that lead to positive relationship outcomes such as loyalty intentions and willingness to provide information to the brand (Labrecque 2014).

Seraj (2012) investigates the online community characteristics from which members derive value and incite engagement. Quality content, and an interactive and self-governed environment, are identified as drivers of value that lead to loyalty and sustainability of Internet communities. In the ongoing debate about the value of a 'like,' 'share,' or comment on a brand social media page, engagement and interaction are identified as meaningful brand performance metrics and have gained attention in the academic community (Hollebeek, Glynn and Brodie 2014; Blazevic, Wiertz, Cotte, de Ruyter and Keeling 2014; Malthouse, Haenlein, Skiera, Wege and Zhang 2013; Deighton and Kornfeld 2009). Engagement with the media context has been shown to increase advertising effectiveness (Calder, Malthouse and Schaedel 2009); however, given the rising concerns over online privacy, perception of control over personal information is seen to play an important role in how likely members of a social network are to click on an online advertisement (Tucker 2014).

Value from social media can also be derived from social commerce sites (Stephen and Toubia 2010; Yadav, de Valck, Hennig-Thurau, Hoffman and Spann 2013) and recommendation systems (Hennig-Thurau, Marchand and Marx 2012) that help consumers make better choices. Multidirectional communications across social media are known to affect purchase intention (Wang, Yu and Wei 2012). Even the mere virtual presence of other community members impacts brand evaluations and purchase intentions in social media settings (Naylor, Lamberton and West 2012).

Dissertation manuscripts in the context of the social media research framework

The two manuscripts included in this dissertation investigate distinct aspects of social media and contribute to the emerging literature in the field. The first manuscript, "Media Channel Diagnosticity: Does Social Media Make Me Like Corporate Brands Better?" contributes to the established "Media Channel" stream of social media research (see Figure 2).

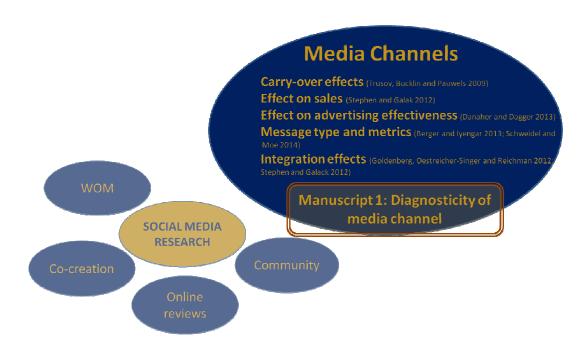


Figure 2. Manuscript 1 contribution to the social media literature.

In the first manuscript, we investigate the diagnosticity of social media versus traditional media as a function of corporate message type. Literature in social media has shown that media channels shape the message and the brand information consumers discuss (Berger and Iyengar 2013). However, whether media channels influence judgments about corporate brand communications remains unknown. This is an important

topic because brands now operate in complex media contexts. A variety of sources of information reach consumers daily; understanding how user and marketer created brand communications influence the formation of consumer's beliefs, attitudes and intentions is critical for brands to succeed in the cluttered markets in which they compete. Literature in corporate branding has shown that corporate messages are not equally diagnostic for forming corporate beliefs (i.e. Biehal and Sheinin 2007). However, the potential differential effect of media remains a significant research gap.

The second manuscript, "Visual Social Media and Image Associations Transfer to the Brand," expands the current social media research framework by creating a new stream of research labeled "Visual Communication" (see Figure 3).

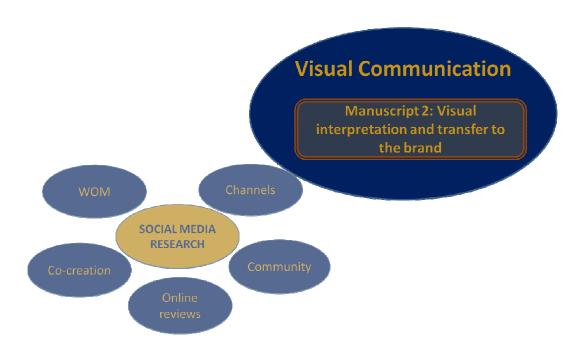


Figure 3. Manuscript 2 contribution to the social media literature.

In the second manuscript, we investigate image processing effects in the social media context. Although visual imagery is critical in digital media, research is limited on which factors influence how visual information is processed in this environment.

Literature in social media has shown that online communities influence behavior (i.e. Wilcox and Stephen 2013). However, how user-generated social media responses (i.e. 'shares') interact with visual content posted in social media and what brand associations are derived remain unknown. In addition, literature in branding shows that brand associations are drivers of brand equity (Keller 1993); however, how these associations are formed in the social media context remains another significant research gap.

References

- Ansari, Asim, Oded Koenigsberg and Florian Stahl (2011), "Modeling Multiple Relationships in Social Networks," *Journal of Marketing Research*, 48 (4), 713-728.
- Barasch, Alixandra and Jonah Berger (2014), "Broadcasting and Narrowcasting: How Audience Size Affects What People Share," *Journal of Marketing Research*: 51 (3), 286-299.
- Berger, Jonah and Katherine L. Milkman (2012), "What Makes Online Content Viral?," *Journal of Marketing Research*, 49 (2), 192-205.
- Berger, Jonah and Raghuram Iyengar (2013), "Communication Channels and Word of Mouth: How the Medium Shapes the Message Contains supplements," *Journal of Consumer Research*, 40 (3), 567-579.
- Biehal, Gabriel J. and Daniel A. Sheinin (2007), "The Influence of Corporate Messages on the Product Portfolio," *Journal of Marketing*, 71 (2), 12-25.
- Blazevic, Vera, Caroline Wiertz, June Cotte, Ko de Ruyter and Debbie Isobel Keeling (2014), "GOSIP in Cyberspace: Conceptualization and Scale Development for General Online Social Interaction Propensity," *Journal of Interactive Marketing*, 28 (2), 87-100.

- Brown, Jo, Amanda J. Broderick and Nick Lee (2007), "Word of Mouth Communication within Online Communities: Conceptualizing the Online Social Network," *Journal of Interactive Marketing*, 21 (3), 2-20.
- Calder, Bobby J., Edward C. Malthouse and Ute Schaedel (2009), "An Experimental Study of the Relationship between Online Engagement and Advertising Effectiveness," *Journal of Interactive Marketing*, 23 (4), 321-331.
- Chen, Yubo, Qi Wang and Jinhong Xie (2011), "Online Social Interactions: A Natural Experiment on Word of Mouth Versus Observational Learning," *Journal of Marketing Research*, 48 (2), 238-254.
- Chen, Yubo, Scott Fay and Qi Wang (2011), "The Role of Marketing in Social Media: How Online Consumer Reviews Evolve," *Journal of Interactive Marketing*, 25 (2), 85-94.
- Chen, Yubo, Yong Liu and Jurui Zhang (2012), "When Do Third-Party Product Reviews Affect Firm Value and What Can Firms Do? The Case of Media Critics and Professional Movie Reviews," *Journal of Marketing*, 76 (2), 116-134.
- Chen, Zoey and Nicholas H. Lurie (2013), "Temporal Contiguity and Negativity Bias in the Impact of Online Word of Mouth," *Journal of Marketing Research*, 50 (4), 463-476.
- Danaher, Peter J. and Tracey S. Dagger (2013), "Comparing the Relative Effectiveness of Advertising Channels: a Case Study of a Multimedia Blitz Campaign," *Journal of Marketing Research*, 50 (4), 517-534.
- Deighton, John and Leora Kornfeld (2009), "Interactivity's Unanticipated Consequences for Marketers and Marketing," *Journal of Interactive Marketing*, 23 (1), 4-10.
- Dellarocas, Chrysanthos, Xiaoquan (Michael) Zhang and Neveen F. Awad (2007), "Exploring the Value of Online Product Reviews in Forecasting Sales: The Case of Motion Pictures," *Journal of Interactive Marketing*, 21 (4), 23-45.
- Dhar, Vasant and Elaine A. Chang (2009), "Does Chatter Matter? The Impact of User-Generated Content on Music Sales," *Journal of Interactive Marketing*, 23 (4), 300-307.
- Dwyer, Paul (2007), "Measuring the Value of Electronic Word of mouth and its Impact in Consumer Communities," *Journal of Interactive Marketing*, 21 (2), 63-79.
- eMarketer (2013), Social Networking Reaches Nearly One in Four Around the World. Available at http://www.emarketer.com/Article/Social-Networking-Reaches-Nearly-One-Four-Around-World/1009976#sthash.sfUjQiC1.dpuf. Accessed 5/20/2014.

- Goldenberg, Jacob, Gal Oestreicher-Singer and Shachar Reichman (2012), "The Quest for Content: How User-Generated Links Can Facilitate Online Exploration," *Journal of Marketing Research*, 49 (4), 452-468.
- Hautz, Julia, Johann Füller, Katja Hutter and Carina Thürridl (2014), "Let Users Generate Your Video Ads? The Impact of Video Source and Quality on Consumers' Perceptions and Intended Behaviors," *Journal of Interactive Marketing*, 28 (1), 1-15.
- Hennig-Thurau, Thorsten, André Marchand and Paul Marx (2012), "Can Automated Group Recommender Systems Help Consumers Make Better Choices?," *Journal of Marketing*, 76 (5), 89-109.
- Hollebeek, Linda D., Mark S. Glynn and Roderick J. Brodie (2014), "Consumer Brand Engagement in Social Media: Conceptualization, Scale Development and Validation," *Journal of Interactive Marketing*, 28 (2), 149-165.
- Hovland, Carl I., Irving L. Janis and Harold H. Kelley (1953), *Communication and persuasion: Psychological studies of opinion and change*. New Haven, CT: Yale University Press.
- Huang, Jinsong, Song Su, Liuning Zhou and Xi Liu (2013), "Attitude Toward the Viral Ad: Expanding Traditional Advertising Models to Interactive Advertising," *Journal of Interactive Marketing*, 27 (1), 36-46.
- Katona, Zsolt, Peter Pal Zubcsek and Miklos Sarvary (2011), "Network Effects and Personal Influences: The Diffusion of an Online Social Network," *Journal of Marketing Research*, 48 (3), 425-443.
- Keller, Kevin L. (1993), "Conceptualizing, Measuring, and Managing Customer-Based Brand Equity, *Journal of Marketing*, 57 (1), 1-22.
- Kozinets, Robert V., Kristine de Valck, Andrea C. Wojnicki and Sarah J.S. Wilner (2010), "Networked Narratives: Understanding Word-of-Mouth Marketing in Online Communities," *Journal of Marketing*, 74 (2), 71-89.
- Labrecque, Lauren I (2014), "Fostering Consumer–Brand Relationships in Social Media Environments: The Role of Parasocial Interaction," *Journal of Interactive Marketing*, 28 (2), 134-148.
- Liu-Thompkins, Yuping and Michelle Rogerson (2012), "Rising to Stardom: An Empirical Investigation of the Diffusion of User-Generated Content," *Journal of Interactive Marketing*, 26 (2), 71-82.
- Ludwig, Stephan, Ko de Ruyter, Mike Friedman, Elisabeth C. Brüggen, Martin Wetzels and Gerard Pfann (2013), "More Than Words: The Influence of Affective Content

- and Linguistic Style Matches in Online Reviews on Conversion Rates," *Journal of Marketing:* 77(1), 87-103.
- Luo, Xueming, Sascha Raithel, and Michael A. Wiles (2013), "The Impact of Brand Rating Dispersion on Firm Value," *Journal of Marketing Research*, 50 (3), 399-415.
- Malthouse, Edward C., Michael Haenlein, Bernd Skiera, Egbert Wege and Michael Zhang (2013), "Managing Customer Relationships in the Social Media Era: Introducing the Social CRM House," *Journal of Interactive Marketing*, 27 (4), 270-280.
- McQuarrie, Edward F., Jessica Miller and Barbara J. Phillips (2013), "The Megaphone Effect: Taste and Audience in Fashion Blogging," *Journal of Consumer Research*, 40 (1), 136-158.
- Nam, Hyoryung and P.K. Kannan (2014), "The Informational Value of Social Tagging Networks," *Journal of Marketing* In-Press.
- Naylor, Rebecca W., Cait Poynor Lamberton and Patricia M. West (2012), "Beyond the 'Like' Button: Exploring the Effects of Mere Virtual Presence on Brand Evaluation," *Journal of Marketing*, 76 (6), 105-120.
- Nielsen (2012), State of the Social Media. The Social Media Report 2012. Available at http://blog.nielsen.com/nielsenwire/social/2012/. Accessed 2/10/2013.
- Pan, Lee-Yun and Jyh-Shen Chiou (2011), "How Much Can You Trust Online Information? Cues for Perceived Trustworthiness of Consumer-generated Online Information," *Journal of Interactive Marketing*, 25 (2), 67-74.
- Park, Cheol and Thae Min Lee (2009), "Antecedents of Online Reviews' Usage and Purchase Influence: An Empirical Comparison of U.S. and Korean Consumers," *Journal of Interactive Marketing*, 23 (4), 332-340.
- Purnawirawan, Nathalia, Patrick De Pelsmacker and Nathalie Dens (2012), "Balance and Sequence in Online Reviews: How Perceived Usefulness Affects Attitudes and Intentions," *Journal of Interactive Marketing*, 26 (4), 244-255.
- Ransbotham, Sam, Gerald C. Kane and Nicholas H. Lurie (2012), "Network Characteristics and the Value of Collaborative User-Generated Content," *Marketing Science*, 31 (3), 387-405.
- Scarpi, Daniele (2009), "Does Size Matter? An Examination of Small and Large Web-Based Brand Communities," *Journal of Interactive Marketing*, 24 (1), 14-21.

- Schulze, Christian, Lisa Schöler and Bernd Skiera (2014), "Not All Fun and Games: Viral Marketing for Utilitarian Products," *Journal of Marketing*, 78 (1), 1-19.
- Schweidel, David A. and Wendy W. Moe (2014), "Listening in on Social Media: A Joint Model of Sentiment and Venue Format Choice," *Journal of Marketing Research* In-Press.
- Seraj, Mina (2012), "We Create, We Connect, We Respect, Therefore We Are: Intellectual, Social, and Cultural Value in Online Communities," *Journal of Interactive Marketing*, 26 (4), 209-222.
- Smith, Andrew N., Eileen Fischer and Chen Yongjian (2012), "How Does Brand-related User-generated Content Differ across YouTube, Facebook, and Twitter?," *Journal of Interactive Marketing*, 26 (2), 102-113.
- Stephen, Andrew T. and Jeff Galak (2012), "The Effects of Traditional and Social Earned Media on Sales: A Study of a Microlending Marketplace," *Journal of Marketing Research*, 49 (5), 624-639.
- Stephen, Andrew T. and Olivier Toubia (2010), "Deriving Value from Social Commerce Networks," *Journal of Marketing Research*, 47 (2), 215-228.
- Thompson, Debora V. and Prashant Malaviya (2013), "Consumer-Generated Ads: Does Awareness of Advertising Co-Creation Help or Hurt Persuasion?," *Journal of Marketing*, 77 (3), 33-47.
- Trusov, Michael, Anand V. Bodapati and Randolph E. Bucklin (2010), "Determining Influential Users in Internet Social Networks," *Journal of Marketing Research*, 47 (4), 643-658.
- Trusov, Michael, Randolph E. Bucklin and Koen Pauwels (2009), "Effects of Word-of-Mouth versus Traditional Marketing: Findings from and Internet Social Networking Site," *Journal of Marketing*, 73 (5), 90-102.
- Tucker, Catherine (2014), "Social Networks, Personalized Advertising and Privacy Controls," *Journal of Marketing Research In-Press*.
- Wang, Xia, Chunling Yu and Yujie Wei (2012), "Social Media Peer Communication and Impacts on Purchase Intentions: A Consumer Socialization Framework," *Journal of Interactive Marketing*, 26 (4) 198-208.
- Wilcox, Keith and Andrew T. Stephen (2013), "Are Close Friends the Enemy? Online Social Networks, Self-Esteem, and Self-Control," *Journal of Consumer Research*, 40 (1), 90-103.

Yadav, Manjit S., Kristine de Valck, Thorsten Hennig-Thurau, Donna L. Hoffman and Martin Spann (2013), "Social Commerce: A Contingency Framework for Assessing Marketing Potential," *Journal of Interactive Marketing*, 27 (4), 311-323.

MANUSCRIPT - I

Target Publication: Journal of Advertising or Journal of Interactive Marketing

Media Channel Diagnosticity: Does Social Media Make Me Like Corporate Brands Better?

Gema Vinuales

College of Business Administration, University of Rhode Island, Kingston, RI, USA

Corresponding Author: Gema Vinuales

College of Business Administration

University of Rhode Island

7 Lippitt Rd. Room 216

Kingston, RI 02906

Phone: +1 (401) 874 5064

Email address: gema_vinuales@my.uri.edu

Abstract

Social media have changed the context for brand management by becoming usergenerated sources of corporate brand information that coexist with traditional marketing
communications. A current challenge is to understand how media channels influence the
formation of consumer's attitudes, intentions and beliefs about corporations. In two
studies, we show that social media are more diagnostic than traditional media for
consumers in forming attitudes and intentions about corporate brands. Media credibility
is identified as the driver of these results. On the other hand, social media are not
relatively more diagnostic than traditional media in forming beliefs about corporate
brands. Corporate beliefs do not change as a function of media channel but as a function
of message type.

Introduction

Corporate brands are strategic as well as essential for business success (Barich and Kotler 1991; Fombrun 1996; Brown and Dacin 1997) since they are sources of differentiation and competitive advantage (Aaker 1996, Ghemawat 1986; Brown and Dacin 1997). To raise corporate brand accessibility, equity, trust, and credibility levels, corporations design marketing communications that convey consistent messages across multiple channels. Historically, firms exerted strong control over corporate communications. However, at present, many corporate claimants – shareholders, business partners, competitive users, consumers – are utilizing social media outlets to communicate about companies (Gensler, Völcknerb, Liu-Thompkinsc and Wiertz 2013). Social media are gaining relevance as information outlets (Nielsen 2011, 2012) and have

become a source of corporate brand information that coexists with corporate-initiated communications. Social media are easily accessible to a massive number of consumers and allow for many-to-many multidirectional communications of co-produced content (Kozinets, de Valk, Wojnicki and Wilner 2010) that has changed the context for brand management (Gensler, Völcknerb, Liu-Thompkinsc and Wiertz 2013). A current challenge is to understand how different communication channels influence the formation of consumer's attitudes, intentions and beliefs about corporations.

Understanding the effectiveness of different media channels has become a priority (MSI 2010). Trusov, Bucklin, and Pauwels (2009) investigate how WOM compares with traditional marketing communications and find that WOM communication has longer carryover effects than traditional marketing actions. Berger and Iyengar (2013) explore whether the communication channel influences what consumers talk about and find that oral versus text WOM affect the type of products and brands consumers discuss. Stephen and Galak (2012) investigate the effect of traditional and social media on sales and find that both channels affect purchase outcomes. Danaher and Dagger (2013) develop a model that lets firms compare the relative effectiveness of online and offline advertising channels on purchase outcomes and that help determine the optimal budget allocation. Research advocates for creating media channel synergies since it facilitates content exploration (Goldenberg, Oestreicher-Singer and Reichman 2012). Stephen and Galak (2012) show that social media are a driver of traditional media activity. Similarly, Dinner, van Heerde and Neslin (2014) find that that online and offline advertising influence sales within and across channels. Even across different social media channels, research has shown that content relates to outlet; that is, the content that users post is dependent on the

outlet where it is posted. Scheweidel and Moe (2014) argue that focusing on single social media outlets or aggregating data across social media channels can lead to misleading inferences about brand sentiment. Jointly modeling brand sentiment as a function of the 'where' and the 'what' consumers post, Scheweidel and Moe (2014) show that the integrated measure outperforms other currently used social media metrics. A significant research gap that remains unexplored is the relative diagnosticity of media channel. To the best of our knowledge, the literature has not yet investigated how media channel influences consumer's judgments about brands. The purpose of this manuscript is to understand the diagnosticity of traditional media versus social media – that is, corporateinitiated versus consumer-initiated communications – in forming attitudes, intentions and beliefs about corporate brands. The accessibility-diagnosticity theory (Feldman and Lynch 1988) proposes that when consumers make a judgment, they use information that is accessible in memory, diagnostic for decision making, and relatively more accessible and diagnostic than other information available. The goal of a marketer is to make corporate branding communications accessible and diagnostic so they influence consumer behavior.

Using source credibility theory (Hovland and Weiss 1953), we explore how media channel and message content influence consumer's judgments about corporate brands. Specifically, we investigate whether a corporate advertisement message (traditional media) or a specialized blog posting (social media) differentially affect the diagnosticity of corporate messages. Leveraging corporate brands have become increasingly important since they help differentiate, energize and add credibility to product brands (Aaker 2004). Corporate brand impressions are more elaborated and confidently held than product

brands (Berens, van Riel and van Bruggen 2005) and highly influence consumer product responses. Corporate messages can be classified as they relate to a firm's core competency (CA associations) or to a firm's social responsibility practices (CSR associations) (Brown and Dacin 1997). Literature in corporate branding shows that corporate messages are not equally diagnostic for forming corporate beliefs (Biehal and Sheinin 2007). However, whether the diagnosticity of the CA and CSR message remains unchanged across different media channels is unknown. Given the current crowded media and marketing environments, identifying effective communication channels to deliver corporate messages is critical for success in the marketplace.

In two experiments we show that social media are more diagnostic than traditional media in forming attitudes and behaviors towards corporate brands. Attitudes towards a company, WOM, and purchase intentions were rated significantly higher when participants read a message from a social media versus a traditional media outlet. In addition, we find that media credibility mediates the relationship between media channel and consumer attitudes and intentions. When compared with traditional media channels, social media are considered to be significantly more credible sources of information. We replicate these results using different messages and different industry contexts. However, traditional media are not found to be more diagnostic than social media in forming corporate beliefs. Corporate beliefs about company's ability (CA) and social responsibility practices (CSR) were found to be similarly diagnostic across media channels.

Contributions from this manuscript are twofold: First, findings from these experiments contribute to social media literature by providing further evidence of the

distinct nature of media channels and their relative diagnosticty in forming corporate attitudes and intentions. Second, this manuscript contributes to the corporate branding literature showing that while in traditional media contexts CA messages are more diagnostic than CSR messages in forming product beliefs; in social media contexts, CA and CSR messages are equally diagnostic for forming brand judgments. In addition, these findings have sound implications for corporate brand management. Based on the experimental results, we argue that brand management has become a firm-consumer shared process. Even though sharing control over corporate communications with consumers may entail risks, it is potentially a source of competitive advantage.

Considering the credibility levels of social media channels and the influence of usergenerated content on other online users' attitudes and intentions, we encourage companies to incentive informal WOM communications since they transmit influential messages to consumers.

The rest of the manuscript is structured as follows: First, the conceptual framework and hypotheses are presented. Then, study 1 presents results about media channel diagnosticity and the process responsible for the results. Study 2 replicates findings from study one using a different industry context and using alternative corporate messages. Finally, conclusions and ideas for future research are provided.

Conceptual framework

Communication channels

Communication channels can be categorized as traditional or social media.

Corporate-generated messages tend to be the exclusive means of communication through

traditional media channels. On the other hand, corporate- and consumer-generated messages may be used as means of communication through social media outlets. In this manuscript, we focus on social media channels that exclusively transmit consumer-generated content. Specifically, we operationalize traditional media through corporate advertisements and social media through non-corporate owned specialized blog websites. While media channels are subject to categorization attending different criteria, in the context of this manuscript, media channels are categorized based on the source of the communications.

The degree of corporate control over a brand-related message is dependent on the source of the communication. While corporations craft marketing messages to create specific brand knowledge structures in consumer's minds, they lack control over usergenerated messages distributed through social media. Social media allows and empowers consumers to share their views, preferences, and experiences with brands (Trusov, Bucklin and Pauwels 2009). WOM communications are considered to be one of the most effective marketing communication strategies (Misner 1999). WOM communications via social media overcome consumer resistance (Trusov, Bucklin and Pauwels 2009) since social media users are not considered to seek self-interested economic benefits from sharing their opinions about brands (Arndt 1967; Silverman, 1997). On the other hand, communications through traditional media generate consumer skepticism (Trusov, Bucklin and Pauwels 2009) since the goal of the communication is to persuade potential customers. People develop beliefs about the tactics marketers use to persuade them (Wright 1986). Therefore, while social media communications are considered to be reliable and trustworthy, traditional media communications are considered to be biased

(Hennig-Thurau, Gwinner, Walsh, and Gremler 2004; Brown, Broderick and Lee 2007). Du, Bhattacharya, and Sen (2010) argue that there is a tradeoff between the controllability and credibility of a communication source: the less controllable a source is, the more credible it becomes. Consequently, we argue that compared to traditional media, consumers consider social media to be a more credible source of information (see Table 1).

	Media Channels	
	Traditional media	Social media
Communication	Corporations exert control over	Consumers freely express
Control	communication. Corporate	opinions. Non corporate
	controlled message	controlled message
Consumer's	Considered biased	Considered reliable and
Perception		trustworthy
Persuasion	Generates consumer skepticism	WOM overcomes consumer resistance

Table 1. Media channel differences.

Consumers assess the source of a communication before they accept its claims (Percy and Rossiter 1980; Schlegelmilch and Pollach 2010). Research shows that the source of a communication is often used as heuristic to appraise the validity and relevance of a message (Petty and Cacioppo 1986; Eagly and Chaiken 1984). When consumers cannot, or lack the motivation to, use cognitive resources, they use heuristics to solve problems and make decisions (Bettman, Johnson and Payne 1991). Heuristics are defined as mechanisms that "simplify decision making by limiting the amount of information that is processed and/or by making how that information is processed easy"

(Bettman, Johnson, and Payne 1991, pp. 58-59). We argue that media channel is used as a heuristic to make judgments about corporate brands.

Based on the Wood and Eagly (1981) attribution model of persuasion, the source of a communication shapes expectancies about the message and influences the effectiveness of the communication (Hovland and Weiss 1951). Obermiller and Spangenberg (1998, 2000) argue that consumers are socialized to be skeptical towards advertisements, and therefore they discount ad claims. Consistently, correction research shows that when consumers encounter a source of unwanted bias, mental processes and behaviors correct for its potential influence (Petty, Wegner and White 1998; William, Fitzsimmons, and Block 2004). We contend that consumers use media channel as a heuristic when making judgments based on brand-related messages. Since media channel is an easy heuristic to use, we argue that media channel will influence the formation of attitudes and intentions towards brands.

Formally, we hypothesize that:

H1: Social media are more diagnostic than traditional media in forming attitudes, and intentions towards a corporate brand.

While consumers are socialized to be skeptical about ads (Obermiller and Spangenberg 1998, 2000), that is not the case for blogs. Some specialized blogs (i.e. Mashable or Engadget) are leading sources for news and information and strong resources for credible product evaluations. The fact that millions of unique engaged social media followers visit the sites each month bears this claim. Literature on source credibility supports the relationship between credibility and persuasion effects. Based on source credibility theory (Hovland and Weiss 1951), messages are more persuasive when

the source of the communication is perceived to be more credible. Therefore, we hypothesize that:

H2: Perceived media credibility mediates the relationship between media channel and attitudes and intentions to engage with a corporate brand.

Corporate associations: Corporate ability (CA) and corporate social responsibility (CSR)

Brown and Dacin (1997) define corporate associations as a "generic label for all the information about a company a person holds" (pp. 69). The corporate branding literature shows that corporate associations affect consumer's responses towards products and services (Brown and Dacin 1997; Duncan and Moriarty 1998; Gurhan-Canli and Batra 2004; Hatch and Schultz 2001; Raju and Dhar 1999; Biehal and Sheinin 2007). Specifically, corporate messages have been shown to influence product beliefs and attitudes (Brown and Dacin 1997; Creyer and Ross 1996; Goldberg and Hartwick 1990; Sheinin and Biehal 1999), purchase intentions (Sen and Bhattacharya 2001), product choice (Creyer and Ross 1996), and customer satisfaction (Luo and Bhattacharya 2006). Individual-difference variables such as processing mindsets affect the interpretation of corporate messages (Torelli, Monga, and Kaikati 2012). In addition, the corporate associations literature has bridged to the B2B and financial literature. Homburg, Stierl and Bornemann (2013) argue that CSR engagement fosters customer's trust and strengthens customer-company identification in organizational contexts. In financial terms, corporate associations have been shown to affect a company's market value (Luo and Bhattacharya 2006, 2009), and shareholders wealth (Bharadwaj, Tuli, Bonfrer 2011). To the best of our knowledge, the corporate associations literature has not been explored within the social media context.

Brown and Dacin (1997) show that "not all corporate associations are alike" (p. 70) and distinguish between corporate ability (CA) and corporate social responsibility (CSR) associations. CA associations refer to a firm's core competency and are positioned on product-relevant dimensions such as quality or performance. CA strategies focus on industry leadership, strength of R&D initiatives, or employee expertise. On the other hand, CSR associations refer to a firm's societal obligations and are positioned on less product-relevant dimensions such as commitment to diversity or environmental friendliness. CSR strategies focus on sponsorships, corporate philanthropy, or community involvement (Brown and Dacin, 1997; Sen and Bhattacharya, 2001; Biehal and Sheinin, 2007) (see Table 2).

	Corporate Associations	
	CA associations	CSR associations
Focus	Associations reflect company's	Associations reflect
	expertise in producing and	organization's status and activities
	delivering outputs	with respect to its perceived
		societal obligations
Positioning	CA messages are positioned on	CSR messages are positioned on
	product-relevant dimensions (i.e.	less product-relevant dimensions
	quality, service orientation)	(i.e. social responsibility, ethical
		orientation)
Strategies	CA strategies focus on the	CSR strategies focus on
	expertise of the employees,	environmental friendliness,
	superiority of internal R&D and the	commitment to diversity,
	resulting technological innovation,	community involvement,
	manufacturing expertise, customer	sponsorship, corporate
	orientation, industry leadership	philanthropy

Table 2. CA and CSR associations summary description.

Biehal and Sheinin (2007) argue that all corporate messages are not equally diagnostic. After exposing participants to CA and CSR corporate advertisements, Biehal and Sheinin (2007) find that participants in the CA condition rated product beliefs higher than participants in the CSR condition. In turn, they conclude that CA messages are more diagnostic than CSR messages in forming product beliefs. A significant research gap is whether this difference in message diagnosticity remains constant across media channels. The internet provides ample opportunities for consumers to share and seek others' opinions and experiences with products and brands. Exploring the relative diagnosticity of social media and traditional media channels is critical to understand how consumers form judgments about company brands.

Source effects and message type

Firms' core competencies tend to be clear in consumer minds. However, in general, consumers are not aware of corporate social responsibility initiatives (Alsop 2005; Du, Bhattacharya and Sen 2010). For example, while most consumers know that Volvo manufactures safe cars, few consumers are aware of Volvo's partnerships with Oxfam and WWF or Toyota community involvement. In addition, while consumers are deemed competent to evaluate product attributes or brand performance, estimating corporate ethical practices remains challenging. CSR associations are more abstract and intangible than CA associations (Pomering and Johnson 2009). Since CSR associations lack search and experience characteristics, they are not easily verifiable (Nelson 1970, Pomering and Johnson 2009).

We previously argued that the lack of corporate control over user-generated brandrelated messages distributed through social media makes them trustworthy and influential
for consumer behavior. However, source trustworthiness effects may be mitigated by
source expertise effects (Wiener and Mowen 1986). Compared to non-expert sources,
experts are perceived to deliver more compelling, and in turn, more persuasive messages
(Hovland, Janis and Kelley 1953; Hovland and Weiss 1951; Kelman and Hovland 1953;
Petty, Cacioppo and Schumann 1983).

Based on source expertise research, user-generated communications about corporate social media practices may cause skepticism. Social media users may be regarded as nonexperts as their ability to evaluate corporate societal engagements is likely to be limited. As a result, the lack of source credibility effects will hinder persuasion. On the contrary, user-generated communications about corporate core competencies are likely to be trusted. In this context, consumers are generally regarded as experts since they are deemed capable to evaluate product-relevant features. As a result, source credibility effects will not be mitigated. This is consistent with literature on persuasion knowledge. Friestad and Wright (1994) argue that consumers draw from persuasion knowledge to evaluate and respond to persuasive claims. Ertimur and Gilly (2012) find that when consumers evaluate unsolicited user-generated ads, they are skeptical of the ads' persuasiveness. That is, they are not considered experts to create professional advertisements. Similarly, Thompson and Malaviya (2013) show that disclosing that an ad was created by a consumer triggers skepticism and negatively influence brand evaluations, unless the audience identifies with the creator of the ad. Based on source

credibility and expertise effects, we hypothesize that message type moderates the diagnosticity of media channel. Formally,

formation of beliefs about corporate core competencies (CA associations) **H4**: Social media and traditional media are equally diagnostic for consumers' formation of beliefs about corporate social responsibility practices (CSR associations)

H3: Social media are more diagnostic than traditional media for consumers'

Method

Study 1

Study 1 investigates the diagnosticity of social media versus traditional media and whether media channel is differentially diagnostic for corporate ability and corporate social responsibility messages. In addition, study 1 investigates the underlying process that explains the diagnosticity differences across media channels. That is, study 1 is designed to test H1, H2, H3 and H4.

Design and sample

Study 1 is a 2 (Media channel: social media versus traditional media) X 2 (Message type: CA message versus CSR message) between subjects experimental design. Media channel was manipulated by asking participants to imagine that they were reading from a specialized blog website (social media condition) or from a corporate advertisement (traditional media condition). The message type manipulation was adapted from Biehal and Sheinin (2007). Participants in the CA condition read information about a company's

quality and innovative offerings; participants in the CSR condition read information about a company social responsibility practices.

Members of an online panel (n=128) participated in this study in exchange for a nominal fee. Participants were randomly assigned to one of the four experimental conditions.

Pretest

To confirm that participants interpreted the messages as corporate ability or corporate social responsibility a pretest was conducted. Participants (n= 44) were recruited from the same online panel.

Participants read a corporate ability or a corporate social responsibility message from a fictitious crowdsourcing company (Atlantic Crowdsourcing), and completed a corporate beliefs measure adapted from Biehal and Sheinin (2007). On 7-point Likert scales with "Disagree" and "Agree" endpoints, participants assessed the following statements about Atlantic Crowdsourcing: 1) algorithms optimize the presentation of the tasks so they are relevant and interesting, 2) investments in R&D exceed the industry average, 3) IT administrators diagnose and immediately fix performance issues in the site, 4) employees and requesters pass strict standards of integrity, 5) employees have the flexibility to volunteer in their communities, and 6) support charities such as the LaborNet group. In addition, on a similar 7-point Likert scale, participants indicated how they thought Atlantic Crowdsourcing was positioned in the market: 1) Competence, 2) Innovation, 3) Ethics, and 4) Social responsibility.

Both measures were subjected to confirmatory factor analysis (CFA) and reliability analysis. Although the CFA for the corporate beliefs measure did not show an expected two factor structure, the second eigenvalue equaled 0.92. Given the small sample size used for the pretest, we assumed λ_2 acceptably close to 1 and averaged the first three items of the scale to form a CA beliefs index (α = 0.93), and the second three items to form a CSR beliefs index (α = 0.94). The CFA for the corporate positioning measure showed a two-factor structure. The first two items loaded on one factor and were averaged to form a CA positioning index (α = 0.77); the other two items loaded on a second factor and were averaged to form a CSR positioning index (α = 0.88).

An independent sample t-test analysis shows the anticipated results. Participants in the CA condition rated CA beliefs ($M_{CA} = 6.43 > M_{CSR} = 4.15$; t(42) = 6.65, p < .001) and CA positioning ($M_{CA} = 6.60 > M_{CSR} = 5.98$; t(42) = 2.65, p = .01) significantly higher than participants in the CSR condition. Also, participants in the CSR condition rated CSR beliefs ($M_{CA} = 2.95 < M_{CSR} = 6.22$; t(42) = -8.29, p < .001) and CSR positioning ($M_{CA} = 3.97 < M_{CSR} = 6.30$; t(42) = -6.14, p < .001) significantly higher than participants in the CA condition.

Procedure and stimuli

Panel members were invited to participate in an online survey about crowdsourcing companies that took 5-10 minutes to complete. Participants were asked to imagine that they were looking for information on the Internet about crowdsourcing websites similar to MTurk and that they run into a specialized blog website (social media condition) in which a blogger talked about Atlantic Crowdsourcing, or a corporate advertisement

(traditional media condition) from Atlantic Crowdsourcing. To make sure participants were familiar with the media channel we provided the definition. We described a specialized blog website as a non-company sponsored site where consumers share opinions and information without being paid. We described a corporate advertisement as an ad paid by a company. Participants were told that they would see the information included in the blog posting or corporate advertisement in the next window.

Then, participants were exposed to either the CA or CSR message. Biehal and Sheinin (2007) developed two corporate messages that are adapted to the current research context. In the traditional media condition, we used formal-language CA and CSR messages. In the social media condition, we maintained the CA and CSR information consistent but replaced the pronouns (i.e., instead of 'our products' we used 'their products') and added personal opinion expressions (i.e., 'I think') to add realism to the specialized blog postings (see Appendix 1 for stimuli details).

Immediately after the participants read the stimulus information, they responded to dependent measures, covariate measures, and manipulation checks and provided general demographic information. Then, participants were thanked for completing the survey and received a validation code to be entered on the Amazon's Mechanical Turk site.

Measures

Unless the contrary is noted, dependent variables, covariates, and manipulation checks are all measured using 7-point Likert scales that have "Disagree/Agree" end points. We assessed the psychometric characteristics and reliability for all measures.

Dependent measures: Corporate beliefs, attitude towards the company, word of mouth and intention to engage with the company. Corporate beliefs were measured as in the pretest. The measure was adapted from Biehal and Sheinin (2007) and included three items that captured CA beliefs (α = .92) and three items that captured CSR beliefs (α = .92). The corporate beliefs measure showed a two-factor structure. The attitude (α = .88), statements were: 1) Atlantic Crowdsourcing is a good company, 2) I feel positive about Atlantic Crowdsourcing, and 3) I do not like Atlantic Crowdsourcing. WOM was measured (α = .90) using I would: 1) likely share information about Atlantic Crowdsourcing with my friends, 2) likely spread positive word of mouth about Atlantic Crowdsourcing, 3) not likely recommend Atlantic Crowdsourcing to my friends (Maxham and Neterreyer 2003). To measure intention to engage with the company (α = .74), participants stated the extent to which they would: 1) like to learn more about Atlantic Crowdsourcing, 2) be motivated to respond to Atlantic Crowdsourcing's future communications, and 3) not be interested in following Atlantic Crowdsourcing in social media.

Covariates: Familiarity with crowdsourcing companies and support for CSR. To capture familiarity with crowdsourcing companies (α = .93), participants stated to what extent they were 1) familiar, 2) knowledgeable, and 3) not experienced with crowdsourcing websites (Kent and Allen 1994). In addition, personal support for CSR (α = .74) has previously been identify as moderator of consumer's responses to CSR activities (Sen and Bhattacharya 2001) and is captured using: I support 1) corporate social responsibility programs, 2) donations to charities that support ethical labor

practices, and 3) charities that assist technology development for all (reversed item) (Adapted from Sen and Bhattacharya 2001).

Other measures: Credibility of the media channel and the message. Credibility of the media channel (α = .91) was adapted from Meyer (1988). Participants indicated to what extent corporate advertisements (traditional media condition) or specialized blog websites (social media condition) were: 1) credible, 2) reliable, 3) can be trusted, 4) fair, 5) biased, 6) accurate, and 7) objective. To capture credibility of the communication (α = .82), participants showed their agreement with the message being 1) credible and 2) believable.

Manipulation checks: Media channel and message type. The media channel manipulation was assessed by asking participants to choose from: 1) corporate advertisement, 2) specialized blog website, and 3) other as the source of the information that was presented to them. In addition, to capture perceived corporate control over the communication (α = .95), participants responded to: Atlantic Crowdsourcing 1) paid to make the information you read available to consumers, 2) came up with the information you read, and 3) did not have control over the information you read, on 7-point Likert scales anchored "Disagree/Agree."

The effectiveness of the message type manipulation was assessed as in the pretest. The corporate positioning measure included two items that captured a corporate positioning on CA (α = .71) and two items that captured a corporate positioning on CSR (α = .95). The corporate positioning measure showed a two-factor structure.

Results

Manipulation checks. The media channel and message manipulations worked as intended. Survey participants were screened based on the media channel manipulation check. Participants who failed to select the correct option were excluded from the sample. The final sample comprised 61 participants in the traditional media condition (48% of the population) and 67 participants in the social media condition (52% of the population). As expected, participants in the traditional media condition perceived the corporation as exerting more control over the communication than did participants in the social media condition ($M_{trad} = 5.83$, $M_{soc} = 2.36$; t(126) = 13.66, p < .001). Perceived corporate control did not change as a function of message type ($M_{CA} = 4.15$, $M_{CSR} = 3.88$; t(126) = .68, p > .05).

As anticipated, participants in the CA condition perceived Atlantic Crowdsourcing to be more strongly positioned on competence and innovation than on ethics and social responsibility ($M_{CA} = 6.49 > M_{CSR} = 5.61$; t(126) = 5.30, p < .001). Consistently, participants in the CSR condition perceived Atlantic Crowdsourcing to be more strongly positioned on ethics and social responsibility than on competence and innovation ($M_{CA} = 4.73 < M_{CSR} = 6.65$; t(126) = -8.40, p < .001).

Media diagnosticity in forming beliefs, attitudes, and intentions towards a corporate brand. Consistent with hypothesis 1 (H1), social media are more diagnostic than tradition media in forming attitudes and intentions towards a corporate brand. A 2 (Media channel) X 2 (Message) ANOVA using attitude towards the company, intention to engage, and WOM as the dependent measures, revealed two of the three predicted significant main effects. Participants in the social media condition showed a more positive attitude

towards Atlantic Crowdsourcing than participants in the traditional media condition did $(M_{trad} = 5.08, M_{soc} = 5.85; F(1, 126) = 14.74, p < .001)$. Similarly, compared to participants who read the message from a corporate ad, participants who read the message from a specialized blog website indicated higher intentions to engage with the company $(M_{trad} = 4.87, M_{soc} = 5.52; F(1, 126) = 8.70, p < .01)$. Participants in the social media condition indicated higher WOM intentions than participants in the social media conditions; however, this effect was only close to significance $(M_{trad} = 4.93, M_{soc} = 5.41; F(1, 126) = 3.33, p = .07)$. Results show that the size of the effect of media channel on WOM intentions is small to medium $(\eta^2 = .03)$, and therefore, even if the difference between the means is not significant the effect of media channel on WOM should not be considered insignificant. Familiarity with crowdsourcing websites was initially included as a covariate but dropped from the analyses since it did not reach significance levels.

The same 2 (Media channel) X 2 (Message type) ANOVA with CA beliefs as a dependent variable did not show the predicted effect and, thus H3 is not supported. Participants in the social media condition did not rate CA beliefs higher than participants in the traditional media condition ($M_{trad} = 5.30$, $M_{soc} = 5.08$; F (1, 126) = .30, p > .05). Therefore, these results do not suggest that traditional and social media are differentially diagnostic for forming corporate beliefs about corporate ability practices. Results show a significant main effect of message type, providing further validity to our manipulation ($M_{CA} = 6.35 > M_{CSR} = 4.01$; F(1, 126) = 129.05, p < .001).

The 2 (Media channel) X 2 (Message type) ANCOVA with CSR beliefs as the dependent variable and support for corporate social responsibility practices as the

covariate (F (1, 126) = 4.20, p < .05) supports H4. The analysis shows that social and traditional media are equally diagnostic for forming beliefs about corporate social responsibility practices. Participants rated CSR beliefs similarly in the corporate advertisement and blog conditions (p > .05). Results show a main effect of message type, providing further validity to our CSR manipulation ($M_{CA} = 3.87 < M_{CSR} = 6.45$; F(1, 126) = 186.12, p < .001).

Based on these results, we conclude that social media are more diagnostic than traditional media in forming attitudes and intentions towards a corporate brand; however, media channel is not differentially diagnostic for forming beliefs towards corporate brands. While participants' attitudes and intentions were influenced by media channel and independent of message type, their beliefs about corporate brands were influenced by message type but independent from communication outlet. Thus, the analyses indicate that while changes in the formation of attitudes and intentions are driven by media channel, the formation of corporate brand beliefs is driven by message type.

Mediation analysis. To examine the possibility that the results are driven by distinct levels of message credibility, we perform a 2 (Media channel: traditional vs. social media) X 2 (Message: CA vs. CSR) ANOVA with message credibility as the dependent variable. Familiarity with crowdsourcing websites was initially included as a covariate but dropped from the analysis since it failed to reach significance (F (1, 126) = .03, p > .05). The ANOVA test did not reveal main effects of media channel ($M_{trad} = 5.44$, $M_{soc} = 5.36$; F (1, 126) = .21, p > .05) or message type ($M_{CA} = 5.40 < M_{CSR} = 5.40$; F (1, 126) = .00, p > .05). There was no two-way interaction effect (F (3, 124) = .04, p > .05). In

addition, the analysis shows that message credibility levels were high (M = 5.40). Thus, we rule out message credibility as the driver of the results.

The same 2 (Media channel) X 2 (Message type) ANOVA with media credibility as the dependent measure shows a main effect of media channel. Compared to corporate advertisements, participants considered specialized blog websites to be significantly more credible sources of information ($M_{trad} = 3.72$, $M_{soc} = 4.71$; F (1, 126) = 29.37, p < .001). No other main effect ($M_{CA} = 4.21$, $M_{CSR} = 4.26$; F (1, 126) = .00, p > .05) or interaction effect was significant (F (3, 124) = .63, p > .05). Our conceptualization posited that perceived media credibility mediates the relationship between media channel and attitudes and intentions towards a corporate brand (see Figure 4).

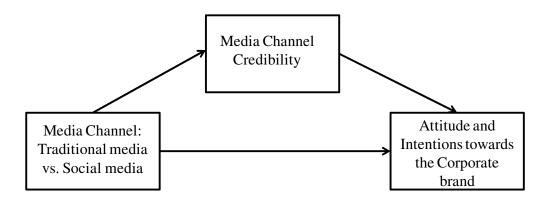


Figure 4. Mediation model.

To test H2, we use a bootstrapping method (Preacher and Hayes 2008; Zhao, Lynch, and Chen 2010). A confidence interval (CI) that excludes zero for the indirect effect would reveal that media credibility mediates the relationship between media channel and attitudes and intentions towards the corporate brand. Using attitude as the dependent measure, the confidence interval for the indirect effect excludes zero (95% CI [.23, .72]).

Similarly, the confidence interval for the indirect effect excludes zero (95% CI [.32, .98]) when WOM is used as the dependent variable. However, when intention to engage is used as the dependent variable, the confidence interval for the indirect effect includes zero (95% CI [- .02, .46]). Nevertheless, the lower bound of this CI is close to zero. The confidence interval for the direct effect includes zero as well (95% CI [- .03, .94]). Based on the criteria for establishing mediation and its type presented by Zhao, Lynch Jr., and Zhen (2010), the lack of significance of the direct and indirect effects means no mediation or direct effects. Given the significant relationship between media channel and intention to engage (r = .25, p < .01), we argue that mediation requires further investigation in study 2. Therefore, we do not yet make a conclusion about hypothesis 2.

Discussion

Study 1 finds that social media are more diagnostic than traditional media in forming attitudes and intentions towards a corporate brand; however, they are equally diagnostic for forming beliefs about a corporation. While changes in attitudes and intentions are driven by the media channel and independent of the content of the communication, the differences in corporate beliefs are driven by the content of the message and independent of the media outlet used to transmit the information. Although the effect of media channel in WOM intention was only close to significance, the reported small to medium effect size indicates that the effect is not negligible. Given that WOM is considered one of the most effective marketing strategies and the cost of incentivizing it reasonable, we make a strong case for the importance of this result.

In addition, study 1 tentatively identifies the process underlying the media channel effects. A bootstrapping mediation analysis shows that media credibility mediates the relationship between media channel and attitudes and WOM intentions towards the corporate brand. The CI of the indirect effect included zero when intention to engage was used as the dependent measure. However, the lower bound of the interval was close to zero. Mediation effects will be further investigated in study 2.

Study 2

The purpose of study 2 is to replicate the findings of study 1 in another industry context and using different corporate messages. Study 2 is designed to provide external validity to the results found in study 1. Thus, study 2 is designed to test H1, H2, H3, and H4.

Design and sample

One hundred and twenty one (n=121) members of the same online panel participated in this study in exchange for a nominal fee. A 2 (Media channel: social media versus traditional media) X 2 (Message type: CA message versus CSR message) between subjects experimental design was used. Media channel and message type were manipulated as in study 1.

Pretest

To confirm that participants interpreted the new messages as corporate ability or corporate social responsibility related; and that we created a strong CA and CSR

positioning statements, a pretest was conducted. Fifty-two (n= 52) participants were recruited from the same online panel.

Similarly as in study 1, participants read a corporate ability or a corporate social responsibility message from a fictitious financial company (Atlantic Finance Company), and responded to corporate beliefs and corporate positioning measures. On 7-point Likert scales with "Disagree" and "Agree" endpoints participants showed the extent to which they agree or disagreed with: Atlantic Finance Company (AFC) 1) provides extraordinary advice because it invests in the latest technology to construct complex financial models, 2) mutual funds outperform Fidelity Investments and the Dow Jones Index, 3) profitability exceeds the industry average, 4) is a leader in ethical business and labor practices, 5) employees pass strict standards of integrity before joining the company, and 6) employees take a few hours off of their work week to contribute to the community. In addition, on a similar 7-point Likert scale participants indicated how they thought AFC was positioned in the market: 1) Competence, 2) Quality, 3) Ethics, and 4) Social Responsibility.

The corporate beliefs and corporate positioning measures both showed the expected two factor structure. The first three items of the corporate beliefs measure were averaged to form the CA beliefs index (α = .86), and the second three items to form a CSR beliefs index (α = .77). The first two items of the corporate positioning measure were averaged to form a CA positioning index (α = .88); the other two to form a CSR positioning index (α = .90).

An independent sample t-test analysis supports the effectiveness of the manipulations. Participants in the CA condition rated CA beliefs ($M_{CA} = 5.89 > M_{CSR} = 0.89$)

3.97; t(50) = 8.23, p < .001) and CA positioning ($M_{CA} = 6.56 > M_{CSR} = 5.26$; t(50) = 4.02, p < .001) significantly higher than participants in the CSR condition. Also, participants in the CSR condition rated CSR beliefs ($M_{CA} = 4.28 < M_{CSR} = 6.04$; t(50) = -5.54, p < .001) and CSR positioning ($M_{CA} = 3.98 < M_{CSR} = 6.46$; t(50) = -6.43, p < .001) higher than participants in the CA condition.

Procedure and stimuli

The procedure was similar to the one used in study 1, except that participants were asked to imagine that they were looking for information about financial companies instead of crowdsourcing websites. The CA and CSR messages were different from study 1 but highlighted corporate CA or CSR associations (adapted from Biehal and Sheinin 2007) (see Appendix 1 for stimuli details). After participants read the stimulus information from an advertisement or a blog, they responded to dependent measures, covariate measures, and manipulation checks and provided general demographic information. Then, they were thanked and provided with an MTurk code to validate the results.

Measures

All measures are captured on 7-point Likert scales anchored "Disagree/Agree" and subjected to CFA and reliability analyses. Alpha levels are reported for each measure.

Dependent measures: Corporate beliefs, attitude towards the company, word of mouth and intention to engage with the company. Corporate beliefs were captured as in the pretest. The measure shows two orthogonal factors: CA beliefs (α = .90) and CSR

beliefs (α = .81). Attitude (α = .92), WOM (α = .91) and intention to engage with Atlantic Finance (α = .82) were measured using the same scales as in study 1.

Covariates: Familiarity with financial companies and support for CSR. Familiarity with financial companies (α = .95) and personal support for CSR (α = .81) were captured as in study 1.

Other measures: Credibility of the media channel and the message. Credibility of the media channel (α = .90) was captured as in the previous study. To capture credibility of the communication (α = .83) we borrowed a scale from Kirmani and Zhu (2007), which they used as a measure of skepticism about an advertisement. Participants showed the extent of their agreement/disagreement with the message being 1) truthful, 2) believable, and 3) deceptive.

Manipulation checks: Media channel and message type. Media channel and message manipulations were captured using the same measures as in study 1: communication source identification, corporate control over the communication (α = .94), and corporate positioning. Corporate positioning showed a two-factor structure (CA_positioning: α = .92. CSR_positioning: α = .93).

Results

Manipulation checks. The media channel and message manipulations worked as intended. In this study, participants were not screened based on the media channel manipulation but a Chi-square test showed a significant effect ($\chi^2(1) = 117.03$, p < .001). Less than 1% of the sample failed to select the appropriate option. As expected, participants in the traditional media condition perceived the corporation to exert more

control over the communication than participants in the social media condition did (M_{trad} = 5.93, M_{soc} = 2.75; t(119)= 11.90, p < .001). Perceived corporate control did not change as a function of message type (M_{CA} = 4.19, M_{CSR} = 4.19; t(119)= .00, p > .05).

As anticipated, participants in the CA condition perceived Atlantic Finance (AFC) to be more strongly positioned on competence and quality than on ethics and social responsibility ($M_{CA} = 6.31 > M_{CSR} = 5.67$; t(119) = 3.37, p < .05). Consistently, participants in the CSR condition perceived Atlantic Finance (AFC) to be more strongly positioned on ethics and social responsibility than on competence and innovation ($M_{CA} = 5.18 < M_{CSR} = 6.56$; t(119) = -7.36, p < .001).

Media diagnosticity in forming beliefs, attitudes, and intentions towards a corporate brand. Consistent with hypothesis 1 (H1), social media are more diagnostic than tradition media in forming attitudes and intentions towards a corporate brand. A 2 (Media channel: traditional vs. social media) X 2 (Message: CA vs. CSR) ANOVA using attitude towards the company, intention to engage, and WOM as the dependent measures, revealed the predicted significant main effect. Participants in the social media condition showed a more positive attitude towards AFC than participants in the traditional media condition did ($M_{trad} = 5.67$, $M_{soc} = 6.14$; F (1, 119) = 6.67, p < .05). Similarly, compared to participants who read the message from a corporate ad, participants who read the message from a specialized blog website indicated higher intentions to engage with the company ($M_{trad} = 5.24$, $M_{soc} = 5.83$; F (1, 119) = 7.71, p < .01). Consistently, participants in the social media condition indicated higher WOM intentions than participants in the social media conditions; however, this effect was only close to significance ($M_{trad} = 5.08$, $M_{soc} = 5.55$; F (1, 119) = 3.69, p = .06). However, the effect of media channel on WOM is

not negligible. Results show that the effect size of media channel is small to medium (η^2 = .03). Familiarity with financial companies was initially included as a covariate but dropped from the analysis since it did not reach significance levels. This was the only main effect in the analyses.

The same 2 (Media channel) X 2 (Message type) ANOVA with CA beliefs as the dependent variable did not show the predicted effect and thus, H3 is not supported. Participants in the social media condition did not rate CA beliefs higher than participants in the traditional media condition ($M_{trad} = 4.87$, $M_{soc} = 4.99$; F (1, 119) = .68, p > .05). Therefore, these results suggest that traditional and social media are equally diagnostic for forming corporate beliefs about corporate ability practices. The results show a main effect of message type, providing further validity to our manipulation ($M_{CA} = 5.99 > M_{CSR} = 3.97$; F(1, 119) = 125.53, p < .001).

The 2 (Media channel) X 2 (Message type) ANCOVA with CSR beliefs as the dependent variable and support for corporate social responsibility practices as the covariate (F (1, 119) = .177, p < .05) supports H4. The analysis shows that social and traditional media are equally diagnostic for forming beliefs about corporate social responsibility practices. Participants rated CSR beliefs similarly in the corporate advertisement and blog conditions ($M_{trad} = 5.27$, $M_{soc} = 5.40$; F (1, 119) = .18, p > .05). Results also show a main effect of message type, providing further validity to our manipulation ($M_{CA} = 4.34 < M_{CSR} = 6.26$; F(1, 119) = 122.20, p < .001).

Consistent with study 1, we argue that social media are more diagnostic than traditional media in forming attitudes and intentions towards a corporate brand; however, media channel is not differently diagnostic for forming beliefs towards corporate brands.

While participants' attitudes and intentions were influenced by media channel and independent of message type, participants' beliefs about corporate brands were influenced by message type, but independent of communication outlet. Thus, we replicate the results of study 1 in a distinct industry context and using different CA and CSR messages. Similarly as in study 1, we make a strong case for the importance of the media channel effect in WOM even if the result did not reach significance.

Mediation analysis. To examine the possibility that results were driven by distinct levels of message credibility, we conducted a 2 (Media channel: traditional vs. social media) X 2 (Message: CA vs. CSR) ANOVA with message credibility as the dependent variable. Familiarity with financial companies was initially included as a covariate but dropped from the analysis since it failed to reach significance (F (1, 119) = .04, p > .05). The ANOVA test did not reveal main effects of media channel ($M_{trad} = 5.06$, $M_{soc} = 5.34$; F (1, 119) = 2.55, p > .05) or message type ($M_{CA} = 5.18$, $M_{CSR} = 5.24$; F (1, 119) = .06, p > .05); the two-way interaction effect also was not significant (F (3, 117) = .46, p > .05). In addition, the analysis showed that perceived message credibility levels were high. Thus, we rule out message credibility as the driver of the results.

The same 2 (Media channel) X 2 (Message type) ANOVA with media credibility as the dependent measure shows a main effect of media channel. Compared to corporate advertisements, participants consider specialized blog websites to be significantly more credible sources of information ($M_{trad} = 3.89$, $M_{soc} = 4.56$; F (1, 119) = 15.74, p < .001). No other main effect ($M_{CA} = 4.32$, $M_{CSR} = 4.19$; F (1, 119) = .68, p > .05) or interaction effect was significant (F (3, 117) = .49, p > .05). Our conceptualization posits that media

credibility mediates the relationship between media channel and attitudes and intentions towards a corporate brand

Using the bootstrapping methodology (Preacher and Hayes 2008; Zhao, Lynch, and Chen 2010) we seek evidence regarding H2. Using attitude towards the company as a dependent measure, the confidence interval for the indirect effect excludes zero (95% CI [.13, .52]). Similarly, the confidence interval for the indirect effect excludes zero (95% CI [.13, .74]) when WOM is used as a dependent variable. Consistently, when intention to engage is used as the dependent variable, the confidence interval for the indirect effect excludes zero as well (95% CI [.07, .43]). Based on the criteria for establishing mediation and its type presented by Zhao, Lynch Jr., and Zhen (2010), these findings support a full mediation effect, supporting hypothesis two.

Discussion

Study 2 replicates findings from study1 and finds support for H1, H2 and H4, and rejects H3. In study 1, we argued that although results did not show a full mediation effect for intentions to engage with the company, the CI was close to excluding zero. In study 2, we find support for the full mediation model, providing support to our previous claims.

A possible explanation for the lack of support for hypothesis three may be lack of differences in perceived source expertise. Unfortunately, we failed to capture perceived source expertise and we cannot further elaborate on this potential explanation. In a follow-up experiment we plan to measure perceived communicator expertise and assess whether perceived expertise changes as a function of message type. Participants rated the

credibility of the messages high independently of channel and message type. While no differences in credibility makes for a strong case that the media diagnosticity results are driven by media credibility effects and not message effects, this may be an indication of a lack of source expertise variation as a function of message type.

An alternative explanation is the informational power of media channel as a heuristic. Consumers are known to reach satisfactory rather than optimal conclusions (Bettman 1979; Newell and Simon 1972). Consumers do not process all the information that is available but the information needed to feel comfortable with a decision. In the context of this study, the diagnostic power of media channel may have been enough to reach a satisfactory conclusion about the corporate brand. In that case, the use of alternative heuristics such as source expertise may have been avoided.

Discussion, limitations, and ideas for future research

It may sound counterintuitive, but giving up some control over business communications may bring benefits to a corporation's bottom line. While corporate-controlled communications generate consumer skepticism, non-corporate controlled communications enjoy credibility. Studies 1 and 2 indicate that social media are more diagnostic than traditional media in forming attitudes and intentions towards corporate brands, and that media credibility is responsible for these results. These findings are in line with research that claims that self-governance is a driver of value in online communities (Seraj 2012). Studies 1 and 2 also show that social and traditional media are equally diagnostic in forming beliefs about corporate brands. Although Biehal and Sheinin (2007) show that CA messages are more diagnostic than CSR messages in

forming product beliefs, our studies indicate that this is not the case for corporate brands. Potential explanations for the lack of significant effects are included in the discussion section of study 2.

From a managerial perspective, we argue that although social media do not replace traditional media, they bring a credibility and trustworthiness dimension to corporate communications that is otherwise difficult to achieve. Consistent with Goldenberg, Oestreicher-Singer and Reichman (2012), Stephen and Galak (2012), and Dinner, van Heerde, and Neslin (2014) we encourage corporations to create synergies across channels and incentive eWOM. Research shows that individual media channels offer distinct contributions to an overall brand management strategy.

From a theoretical perspective, this paper contributes to the social media and corporate branding literatures. Specifically, this paper expands the "media channel" stream of research of the social media research framework presented at the beginning of the dissertation. Although efforts have been made to understand how social media compares to traditional media (Berger and Iyengar 2013; Schweidel and Moe 2014; Trusov, Bucklin and Pauwels 2009; Stephen and Galack 2012; Danaher and Dagger 2013; Goldenberg, Oestreicher-Singer and Reichman 2012), to the best of our knowledge, media diagnosticity effects had not yet been explored in the social media literature. This paper also contributes to the corporate branding literature by expanding the CA-CSR research framework to the new media context. Research in corporate branding has shown that CA and CSR messages are differentially diagnostic for consumers' formation of beliefs about products (Brown and Dacin 1997, Biehal and Sheinin 2007); however, this is the first attempt to understand media channel

diagnosticity effects as a function of message type. Our experiments indicate that message type does not have an effect on the relative diagnosticity of social and traditional media. These findings however are not without limitations. The purpose of this paper was to explore causality; however, consumers base their decisions on multiple sources of information. A future research idea is to simultaneously present multiple messages from multiple sources (i.e. a CA message from social media and a CSR message from a corporate ad) and explore the relative diagnosticity of the media and the message type. In addition, message framing has been shown to influence consumer behavior (e.g. Grewal, Gotlieb and Marmorstein 1994; Maheswaran, Meyers-Levy 1990; Shiv, Edell Britton, and Payne 2004) and they may as well change the diagnosticity of the communication channel.

We operationalize social media through specialized blog websites. We may have enhanced blog credibility by using the word "specialized." A potential research idea is to explore the effect of the blog name (i.e. WSJ blog versus SingleMom & Money blog versus Susan blog) on its credibility, and in turn, its diagnosticity. In addition, social network sites are also considered social media channels. To generalize the findings of this manuscript to the entire social media context, future research could explore alternative operationalizations of new media (ie. Facebook).

References

Aaker, David A. (1996), *Building Strong Brands*. New York: The Free Press.

Aaker, David A. (2004), "Leveraging the Corporate Brand," *California Management Review*, 46 (3), 6-18.

- Alsop, Ronald J. (2005), *Communicating Corporate Citizenship*. Leading Perspectives by Business for Social Responsibility, Summer, 4-5.
- Arndt, Johan (1967), "Role of Product-Related Conversations in the Diffusion of a New Product," *Journal of Marketing Research*, 4 (3), 291-295.
- Barich, Howard and Philip Kotler (1991), "A Framework for Marketing Image Management," *Sloan Management Review*, Winter, 94-104.
- Berens, Guido, Cees B.M. van Riel and Gerrit H. van Bruggen (2005), "Corporate Associations and Consumer Product Responses: The Moderating Role of Corporate Brand Dominance," *Journal of Marketing*, 69 (July), 35-48.
- Berger, Jonah and Raghuram Iyengar (2013), "Communication Channels and Word of Mouth: How the Medium Shapes the Message Contains supplements," *Journal of Consumer Research*, 40 (3), 567-579.
- Bettman, James R. (1979), *An Information ProcessingTheory of Consumer Choice*, Reading, MA: Addison-Wesley.
- Bettman, James, Eric J. Johnson, & John W. Payne (1991), "Consumer Decision Making." In *Handbook of Consumer Behavior*, 50-84, New Jersey: Prentice Hall.
- Bharadwaj, Sundar G., Kapil R. Tuli, and Andre Bonfrer (2011), "The Impact of Brand Quality on Shareholder Wealth," *Journal of Marketing*, 75 (5), 88-104.
- Biehal, Gabriel J. and Daniel A. Sheinin (2007), "The Influence of Corporate Messages on the Product Portfolio," *Journal of Marketing*, 71 (2), 12-25.
- Brown, Jo, Amanda J. Broderick and Nick Lee (2007), "Word of Mouth Communication within Online Communities: Conceptualizing the Online Social Network," *Journal of Interactive Marketing*, 21 (3), 2-20.
- Brown, Tom J. and Peter A. Dacin (1997), "The Company and the Product: Corporate Associations and Consumer Product Responses," *Journal of Marketing*, 61 (1), 68-84.
- Creyer, Elizabeth H. and William T. Ross (1996), "The Impact of Corporate Behavior on Perceived Product Value," *Marketing Letters*, 7 (2), 173-185.
- Danaher, Peter J. and Tracey S. Dagger (2013), "Comparing the Relative Effectiveness of Advertising Channels: a Case Study of a Multimedia Blitz Campaign," *Journal of Marketing Research*, 50 (4), 517-534.

- Dinner, Issac M., Harald J. Van Heerde and Scott Neslin, (2014), "Driving Online and Offline Sales: The Cross-Channel Effects of Digital versus Traditional Advertising," *Journal of Marketing Research In-Press*.
- Du, Shuili, C. B. Bhattacharya and Sankar Sen (2010), "Maximizing Business Returns to Corporate Social Responsibility (CSR): The Role of CSR Communication," *International Journal of Management Reviews*, 12 (1), 8-19.
- Duncan, Tom and Sandra E. Moriarty (1998), "A Communication-Based Marketing Model for Managing Relationships," *Journal of Marketing*, 62 (April), 1-13.
- Eagly, Alice H. and Shelly Chaiken (1984), "Cognitive Theories of Persuasion." In L. Berkowitz (ed.) *Advances in Experimental Social Psychology*, 17, New York: Academic Press.
- Ertimur, Burçak and Mary C. Gilly (2012), "So Whaddya Think? Consumers Create Ads and Other Consumers Critique Them," *Journal of Interactive Marketing*, 26 (3), 115-130.
- Feldman, Jack M. and John G. Lynch Jr. (1988), "Self-Generated Validity and Other Effects of Measurement on Belief, Attitude, Intention, and Behavior," *Journal of Applied Psychology*, 73 (3), 421-35.
- Fombrun, Charles J. (1996), "Reputation: Realizing Value from the Corporate Image," Cambridge, MA: *Harvard Business School Press*.
- Friestad, Marian and Peter Wright (1994), "The Persuasion Knowledge Model: How People Cope with Persuasion Attempts," *Journal of Consumer Research*, 21 (June), 1-31.
- Gensler, Sonja, Franziska Völckner, Yuping Liu-Thompkins and Caroline Wiertz (2013), "Managing Brands in the Social Media Environment," *Journal of Interactive Marketing*, 27 (4), 242-256.
- Ghemawat, Pankaj (1986), *Sustainable advantage*. Harvard Business Review, 64 (5), 53-58.
- Goldberg, Marvin E. and Jon Hartwick (1990), "The Effects of Advertiser Reputation and Extremity of Advertising Claim on Advertising Effectiveness," *Journal of Consumer Research*, 17 (September), 172- 179.
- Goldenberg, Jacob, Gal Oestreicher-Singer and Shachar Reichman (2012), "The Quest for Content: How User-Generated Links Can Facilitate Online Exploration," *Journal of Marketing Research*, 49 (4), 452-468.

- Grewal, Dhruv, Jerry Gotlieb, and Howard Marmorstein (1994), "The Moderating Effects of Message Framing and SourceCredibility on the Price-Perceived Risk Relationship," *Journal of Consumer Research*, 21, (June), 145-53.
- Gürhan-Canli, Zeynep and Rajeev Batra (2004), "When Corporate Image Affects Product Evaluations: The Moderating Role of Perceived Risk," *Journal of Marketing Research*, 41 (2), 197- 205.
- Hatch, Mary Jo and Majken Schultz (2001), "Are the Strategic Stars Aligned for Your Corporate Brand?," Harvard Business Review (February), 128-134.
- Hennig-Thurau, Thorsten, Kevin P. Gwinner, Gianfranco Walsh and Dwayne D. Gremler (2004), "Electronic Word-of-Mouth Via Consumer- Opinion Platforms: What Motivates Consumers to Articulate Themselves on the Internet?," *Journal of Interactive Marketing*, 18 (1), 38-52.
- Homburg, Christian, Marcel Stierl, and Torsten Bornemann (2013), "Corporate Social Responsibility in Business-to-Business Markets: How Organizational Customers Account for Supplier Corporate Social Responsibility Engagement," *Journal of Marketing*, 77 (6), 54-72.
- Hovland, Carl I. and Walter Weiss (1951), "The Influence of Source Credibility on Communication Effectiveness," *Public Opinion Quarterly*, 15, 635-650.
- Hovland, Carl I., Irving L. Janis and Harold H. Kelley (1953), *Communication and persuasion: Psychological studies of opinion and change*. New Haven, CT: Yale University Press.
- Kelman, Herbert C. and Carl I. Hovland, (1953), ""Reinstatement" of the Communicator in Delayed Measurement of Opinion Change," *Journal of Abnormal and Social Psychology*, 48, 327-335.
- Kent, Robert J. and Chris T. Allen (1994), "Competitive Interference Effects in Consumer Memory for Advertising: The Role of Brand Familiarity," *Journal of Marketing*, 58 (July), 97-105.
- Kirmani, Amna and Rui (Juliet) Zhu (2007), "Vigilant Against Manipulation: The Effect of Regulatory Focus on the Use of Persuasion Knowledge," *Journal of Marketing Research*, 44 (4), 688-701.
- Kozinets, Robert V., Kristine de Valck, Andrea C. Wojnicki and Sarah J.S. Wilner (2010), "Networked Narratives: Understanding Word-of-Mouth Marketing in Online Communities," *Journal of Marketing*, 74 (2), 71-89.

- Luo, Xueming and C.B. Bhattacharya (2006), "Corporate Social Responsibility, Customer Satisfaction, and Market Value," *Journal of Marketing*, 70 (October), 1-18.
- Luo, Xueming and C.B. Bhattacharya (2009), "The Debate over Doing Good: Corporate Social Performance, Strategic Marketing Levers, and Firm-idiosyncratic Risk," *Journal of Marketing*, 73 (6), 198-213.
- Maheswaran, Durairaj and Joan Meyers-Levy (1990), "The Influence of Message Framing and Issue Involvement," *Journal of Marketing Research*, 27, 361–367.
- Maxham, James G., III and Richard G. Netemeyer (2003), "Firms Reap What They Sow: The Effects of Shared Values and Perceived Organizational Justice on Customer Evaluations of Complaint Handling," *Journal of Marketing*, 67 (1), 46-62.
- Meyer, P. (1988), "Defining and measuring credibility of newspapers: Developing an Index," *Journalism Quarterly*, 65 (3), 567-574.
- Misner, Ivan R. (1999), *The World's Best Known Marketing Secret: Building Your Business with Word-of-Mouth Marketing*, 2d ed. Austin: Bard Press.
- MSI (2010), "Delivering Value Through Enhanced Media and Channels," 2010- 2012 Research Priorities. Available at http://www.msi.org/research/index.cfm?id=271#RP5. Accessed 7/22/2013.
- Nelson, Phillip (1970), "Information and Consumer Behavior," *Journal of Political Economy*, 78 (2), 45-57
- Newell, Allen, and Herbert A. Simon: *Human Problem Solving*, Prentice-Hall, Englewood Cliffs, NJ, 1972.
- Nielsen (2011), State of the Social Media. The Social Media Report 2012. Available at http://cn.nielsen.com/documents/Nielsen-Social-Media-Report_FINAL_090911.pdf. Accessed 2/10/2013.
- Nielsen (2012), State of the Social Media. The Social Media Report 2012. Available at http://blog.nielsen.com/nielsenwire/social/2012/. Accessed 2/10/2013.
- Obermiller, C. and Eric R. Spangenberg (1998), "Development of a Scale to Measure Consumer Skepticism toward Advertising," *Journal of Consumer Psychology*, 7 (2), 159-186.
- Obermiller, C. and Eric R. Spangenberg (2000), "On the Origin and Distinctiveness of Skepticism Toward Advertising," *Marketing Letters*, 11, 311-322.

- Percy, Larry and John R. Rossiter (1980), *Advertising Strategy: A Communication Theory Approach*. New York: Praeger Publications.
- Petty, Richard E. and John T. Cacioppo (1986), Communication and Persuasion: Central and Peripheral Routes to Attitude Change. New York: Springer-Verlag.
- Petty, Richard E., Duane T. Wegener, and Paul White (1998), "Flexible Correction Processes in Social Judgment: Implications for Persuasion," *Social Cognition*, 16 (1), 93-113.
- Petty, Richard E., John T. Cacioppo and David Schumann (1983), "Central and Peripheral Routes to Advertising Effectiveness: The Moderating Role of Involvement," *Journal of Consumer Research*, 10 (September), 135-146.
- Pomering, Alan and Lester W. Johnson (2009), "Advertising Corporate Social Responsibility Initiatives to Communicate Corporate Image. Inhibiting Scepticism to Enhance Persuasion," *Corporate Communications: An International Journal*, 14 (4), 420- 439.
- Preacher, Kristopher and Andrew F. Hayes (2008), "Contemporary Approaches to Assessing Mediation in Communication Research", Sage Sourcebook of Advanced Data Analysis Methods for Communication Research, 13-54, Thousand Oaks, CA: *Sage*.
- Raju, Jagmohan S. and Sanjay K. Dhar (1999), "A Note on the Relationship between Firm Diversification and Corporate Advertising Expenditures," *Marketing Letters*, 10 (1), 33-47.
- Schlegelmilch, Bodo B. and Irene Pollach (2010), "The Perils and Opportunities of Communicating Corporate Ethics," *Journal of Marketing Management*, 21 (3-4), 267-90.
- Schweidel, David A. and Wendy W. Moe (2014), "Listening in on Social Media: A Joint Model of Sentiment and Venue Format Choice," Journal of Marketing Research In-Press.
- Sen, Sankar and C.B. Bhattacharya (2001), "Does Doing Good Always Lead to Doing Better? Consumer Reactions to Corporate Social Responsibility," *Journal of Marketing Research*, 38 (2), 225-243.
- Seraj, Mina (2012), "We Create, We Connect, We Respect, Therefore We Are: Intellectual, Social, and Cultural Value in Online Communities," *Journal of Interactive Marketing*, 26 (4), 209-222.
- Sheinin, Daniel A. and Gabriel J. Biehal (1999), "Corporate Advertising Pass-Through onto the Brand: Some Experimental Evidence," *Marketing Letters*, 10 (1), 63-73.

- Shiv, Baba, Julie A. Edell Britton and John W. Payne (2004), "Does Elaboration Increase or Decrease the Effectiveness of Negatively versus Positively Framed Messages?" *Journal of Consumer Research*, 31(June), 199-208.
- Silverman, George (1997), "How to Harness the Awesome Power of Word of Mouth," *Direct Marketing*, November, 32- 37.
- Stephen, Andrew T. and Jeff Galak (2012), "The Effects of Traditional and Social Earned Media on Sales: A Study of a Microlending Marketplace," *Journal of Marketing Research*, 49 (5), 624- 639.
- Thompson, Debora V. and Prashant Malaviya (2013), "Consumer-Generated Ads: Does Awareness of Advertising Co-Creation Help or Hurt Persuasion?," *Journal of Marketing*, 77 (3), 33-47.
- Torelli, Carlos J., Alokparna Basu Monga, and Andrew M. Kaikati (2012), "Doing Poorly by Doing Good: Corporate Social Responsibility and Brand Concepts," *Journal of Consumer Research*, 38 (February), 948-963.
- Trusov, Michael, Randolph E. Bucklin and Koen Pauwels (2009), "Effects of Word-of-Mouth versus Traditional Marketing: Findings from and Internet Social Networking Site," *Journal of Marketing*, 73 (5), 90-102.
- Wiener, Joshua L. and John C. Mowen (1986), "Source Credibility: on the Independent Effects of Trust and Expertise," *Advances in Consumer Research*, 13, eds. Richard J. Lutz, Provo, UT: Association for Consumer Research, 306-310.
- Williams, P., Gavan J. Fitzsimons and Lauren G. Block (2004), "When Consumers Do Not Recognize 'Benign' Intention Questions as Persuasion Attempts," *Journal of Consumer Research*, 31 (December), 540-550.
- Wood, Wendy and Alice H. Eagly (1981), "Stages in the Analysis of Persuasive Messages: The Role of Causal Inferences and Message Comprehension," *Journal of Personality and Social Psychology*, 40, 246-259.
- Wright, P. L. (1986), "Consumers Intuitive Theories about Marketers' Influence Tactics, Advances in Consumer Research, 13, 1-3. Provo, UT: Association for Consumer Research.
- Zhao, Xinshu, John G. Lynch and Qimei Chen (2010), "Reconsidering Baron and Kenny: Myths and Truths about Mediation Analysis," *Journal of Consumer Research*, 37 (August), 197-206

MANUSCRIPT - II

Target Publication: Journal of Product and Brand Management

Visual Social Media and Image Associations Transfer to the Brand

Gema Vinuales

College of Business Administration, University of Rhode Island, Kingston, RI, USA

Corresponding Author: Gema Vinuales

College of Business Administration

University of Rhode Island

7 Lippitt Rd. Room 216

Kingston, RI 02906

Phone: +1 (401) 874 5064

Email address: gema_vinuales@my.uri.edu

Abstract

Current social media trends highlight the importance of strategizing visual content plans. Visuals are prevalent in new media and research is limited on how social media users interpret images and make judgments about brands. Given the similarities between the image curation process undertaken by brands in their visual social media profiles and the art curation process undertaken by museum professionals in their exhibitions, we develop a conceptual framework based on theories of curation developed within the traditional museum literature. In three studies we show that social media users integrate associations from multiple images when making sense of a brand. In addition we identify 'curatorial' artifacts that change the weight given to each image unique associations when combining multiple visual stimuli. Specifically, social media users anchor the interpretation of a brand on the most popular image on a visual social media profile. The effect of self construal in the interpretation of brand profiles is explored. A discussion section and future research ideas are discussed at the end of the manuscript.

Introduction

Current social media trends highlight the need to strategize visual content plans.

Images are considered pillars of solid content strategies (Forbes 2013) since visually-based content drives engagement (Huffingtonpost 2014; Foxbusiness 2014), enhances click-through rates (Mashable 2014), generates customer interest (Socialmediaexaminer 2014), and effectively communicates brand stories (Entrepreneur 2014). However, visual imagery research in the social media context is

very limited. Social media has facilitated the collection, display (Davison 2009; Warren and Vince 2012), exchange, and sharing of visual materials, and have lead to the creation of some virtual spaces characterized by carefully selected and curated images (Branthwaite 2002; Schroeder 2004). Some argue that curatorship is a natural propensity in the new media (Potter and Banaji 2012), and although the tenets of curation are rooted in museums and museological science, the activity of curatorship has expanded into new content and media domains and is now undertaken by new actors (Feinberg, Geisler, Whitworth and Clark 2012). Research in traditional museum science argues that curation involves structuring relationships and imposing organizational frameworks on works displayed in an exhibition (Chandler 2009). Similarly, in the digital realm the activity of curatorship entails the selection, organization, and presentation of physically intangible objects (i.e., images, videos) that result in digital collections that become part of visual and virtual 'museums'. Therefore, we argue that digital-visual social media sites can be studied using concepts of curatorship applied in the traditional museum context.

Visual imagery is critical in social media since visual consumption takes a central stage on the web (Schroeder 2004). In addition, the 'sharability' of the images is considered a critical driver of social media content marketing strategies success (Forbes 2013). However, research is limited on how visual information is processed in this context and whether visuals associations transfer to the brand. The purpose of this manuscript is to understand whether the characteristics of the visuals (i.e. vividness) – a marketer controlled variable – and the social media responses they generate (i.e., number of 'shares') – a user controlled variable – influence brand judgments. A

raising challenge in marketing is to understand how to operate in an environment in which marketers and consumers share the task of creating brand images in consumer's minds. Specifically, this manuscript addresses the diagnosticity of user and marketer actions in the formation of brand judgments.

Research in social media has investigated phenomena such as WOM (Kozinets, de Valck, Wojnicki, and Wilner 2010; Berger and Milkman 2012; Berger and Schwartz 2011; Berger and Iyengar 2013), co-creation (Ransbotham, Kane and Lurie 2012; Smith, Fischer and Yongjian 2012 Thompson and Malaviya 2013; Hautz, Füller, Hutter and Thürridl 2014), media channel comparisons (Trusov, Bucklin and Pauwels 2009; Stephen and Galak 2012; Danaher and Dagger 2013; Schweidel and Moe 2014; Goldenberg, Oestreicher-Singer and Reichman 2012) online reviews (Luo, Raithel and Wiles 2013; Chen, Liu and Zhang 2012; Ludwig, Ruyter, Friedman, Brüggen, Wetzels and Pfann 2013); and community influence (Ansari, Koenigsberg and Stahl 2011; Naylor, Lamberton and West 2012; Wilcox and Stephen 2013; Barasch and Berger 2014). However, to the best of our knowledge, no research has explored the phenomenon of visual social media communication. Naylor, Lamberton and West (2012) provide anecdotal evidence of the power of images in social media. Nevertheless, the focus of the paper is not on image processing effects but on their mere presence influence in consumer behavior. Given that visual media are known to communicate differently than verbal media (Spencer 2011; Bell and Davison 2012), that the contemporary society is saturated with images (Davison 2009; Mitchell 2005; Warren and Vince 2012) and that consumers and professionals communicate visually

more than ever before (Kenney 2009), understanding how social media users process visual information is deemed extremely relevant for marketing theory and practice.

Corporate visual social media sites contain images that represent or relate to some aspects of the brand; visual assemblages are the result of a curation process undertaken by the brand. Visual-digital sites are composed by several 'pieces of art.' Popular 'pieces' are hypothesized to attract user attention, and in turn, influence judgments about the brand. Drawing from theories of visual attention (Bundesent 1990) and social influence (Turner, Hogg, Oakes, Reicher and Wetherell 1987), we argue that image characteristics and the responses (i.e. number of shares) they generate attract social media users' attention, and anchor the interpretation and judgments of the brand.

In three studies, we show that visual social media profiles influence brand interpretation. That is, the associations derived from visual social media profiles transfer to the brand. Specifically, the personality represented by an image defines the personality of the brand. When collections of images are presented together, they interact so the brand personality becomes hybrid. The hybrid personality is anchored on the most popular image in a social media profile.

We organize the reminder of this manuscript as follows: we begin by summarizing previous research on visual communication, museum studies and self-construal to build our conceptual framework, and then we describe our method and hypotheses. Next, we present the empirical analysis and results. Lastly, we offer implications for theory and practice.

Conceptual framework

Visual communication

Visual media are known to communicate differently than verbal media; they trigger cognitions and emotions (Bell and Davison 2012; Spencer 2011), and communicate in more concrete and telling ways than abstract narratives do (Cochoy 2012). Pictures are more easily recalled and recognized than words (Lutz and Lutz 1978), and since they tend to be vivid, they are more impactful and convey more information than words alone (Kenney 2009). In addition, as social media users consume visual information as a form of entertainment, they acquire knowledge by decoding the meaning of the signs (Cochoy 2012). While social media users glance at images, some associations are assimilated subliminally (Gabriel 2012). In the context of this manuscript, we argue that while browsing over brand-curated collections of visuals, some of the image associations are used as a basis for brand judgments.

Frequently, visuals are not integrated into stories or narratives, but operate as emotional triggers that prompt associations with other images (Gabriel 2012).

Research in psychology and marketing supports the strong potential of visuals to influence consumer behavior (Davison 2009); consumers often make brand decisions just on the basis of aesthetics (Patrick and Hagtvedt 2011), and images are known to affect perceptions, beliefs, and feelings (Branthwaite 2002). While image processing effects have been explored in the traditional marketing communications context, social media present unique aspects for the study of visual communication. In the traditional media context, visual and text communications interact; however, social media allows for fully visual profiles. Interestingly, emerging social media platforms such as

Pinterest, Instagram, Vine, Tumblr, or Snapchat make use of visuals as the exclusive means of communication. In addition, while marketers used to select and establish relationships among visuals to create well crafted brand images, social media allows for image sharing and rearrangement in brand and user's profiles. Also, in traditional media, visuals are not subject to public opinion; however, social media allows for user's support to the aesthetical value of the images (i.e. "share").

Given the limited understanding of visual communications in the social media context, and the close analogy that can be traced between museum exhibitions and visual social media profiles, we argue that theories of curation from the traditional museum literature are a strong base to develop our conceptual framework. Literature in museum studies argues that the goal of a museum exhibition is to stimulate new attitudes and interests on visitors, which in turn lead to WOM (Lord and Lord 2001). Similarly, visual social media profiles aim to generate user's interest and engagement, and in turn WOM in the form of image sharing.

Museums, exhibitions, and curators

Museums are considered temples of learning and spaces for entertainment (McLean 1999; Falk, Moussouri, Coulson 1998; Lord and Lord 2001). Museums transmit ideas and stories (Moser 2010) and allow visitors to explore collections for inspiration, learning, and enjoyment.

Exhibitions are unique to museums, their main attraction, and their instrument for communication (McLean 1999; Lord and Lord 2001; Hong, Chen and Hung 2004). Exhibitions are spaces that allow free movements; spaces visitors can leave and return

as many times as they like. Visitors linger on the art of their interest and skip those pieces that seem unattractive (Belcher 1991). If the exhibition meets visitors' expectations, they may eventually return. A visit is an opportunity for the curator and the spectator to connect and establish a relationship.

Museum curators structure relationships and impose organizational frameworks on the pieces of art. Curators are active producers of meaning (Accord 2010; Puwar and Sharma 2012) through their judgment, selection, and organization of aesthetic artifacts that are displayed in an exhibition. That is, they make sense on the art (Chandler 2009). Meaning-making is a function of the selected art and the subtle nuances that come from the exhibition plan, the lighting, and the color (Chandler 2009; Patience 2010), among other curatorial tactics.

Similarly, in the visual social media context, brands design profiles that through images communicate stories that create strong image and knowledge structures in consumer's minds. Research in marketing has shown that stories provide meaning to brands (Singh and Sonnenburg 2012), are an effective way to communicate with consumers (Woodside 2010) and can strengthen consumer-brand relationships (Escalas 2004). In visual social media contexts, collections of images provide a multifaceted brand image reinforced by thematically organized visuals. Brands aim for users to engage with their postings and re-visit the site. As museum curators make sense of the art, social media content strategists produce meaning through selected images and the artistic artifacts that social media platforms provide. Museums visitors are considered active interpreters and meaning-makers (Macdonald 2007), and we argue that social media users are as well. Therefore, we hypothesize that:

H1: Social media users integrate associations from multiple images in the process of understanding a brand

Consumers have the ability to sort visual information, decode the meaning of signs, and discern relevant content (Gabriel 2012). Given the vast amount of images available in social media and the limitations on human brain processing capabilities, selecting visual information is a must.

Attention has been described as the mechanism that turns looking into seeing. Selective visual attention allows consumers to focus on relevant information (Carrasco 2011) and avoid overloading cognitive resources. According to visual attention research, spatial attention enhances processing of visual stimuli within a focus area (Carrasco 2011) and reduces processing efforts outside (Smith, Singh and Greenlee 2000). Attention tends to be directed towards salient visual features such as lighting and colors (Carrasco 2011). Traditional museum literature argues that light is a key interpretative tool and has significant effects in defining pieces of art as important or aesthetic master pieces (Moser 2010). We argue that what lighting and color is to a museum piece of art, vividness is to an image in a social media profile. We hypothesize that the vividness of an image serves as a prompt for social media user attention. In turn, that image anchors the interpretation of the entire visual social media profile. Associations derived from that image serve as a basis for judgments about the brand. Therefore, vividness is considered a 'curatorial' artifact that changes the weight given to an image's unique associations in the process of integrating multiple visuals. Therefore:

H2: Image vividness enhances the weight given to the associations derived from that picture in the process of integrating multiple visual stimuli to make sense of a brand.

Social nature of museum visiting

Museum visiting is a social event (Macdonald 2007) and interactions with others are crucial for visitors to notice particular exhibitions or understand them in particular ways. Museum visiting is part of a shared and collaborative experience (Heath and vom Lehn 2004). The story, the message, and the opportunity for social groups to experience a museum together is what make museums unique (Gurian 1999).

Visual social media sites become spaces for aesthetic co-creation. Collective interactions through commenting, liking, and sharing motivate social media users to develop, realize, propagate, and promote ideas (Kozinets, Hemetsberger, and Jensen Schau 2008). Some visuals receive more attention and are more popular than others, as indicated by the social media responses they generate. That is, the number of times a visual has been shared is a proxy for image popularity within the social media community. Based on social influence theory (Turner, Hogg, Oakes, Reicher and Wetherell 1987) the actions of social group members have a powerful effect on a given member's behavior. Consumers conform to social influence from peers they know, they do not know (Darley and Latane 1967), and abstract reference groups (Cohen 2003; Naylor, Lamberton and West 2012).

We argue that the social media responses – that is, the number of 'shares' a visual receives – capture social media users attention and make them notice particular images

within a brand profile. Social media users anchor the interpretation of brand on the most popular image on a visual social media profile. That is, the number of shares an image receives is diagnostic to form judgments about the brand. Given that consumers experience conformity pressures from community members (Sridhar and Srinivasan 2012), we hypothesize that the associations derived from popular images are more heavily weighted in the process of integrating multiple visual stimuli when making sense of a brand. Formally,

H3: Image popularity enhances the weight an individual gives to the associations derived from that picture in the process of integrating multiple visual stimuli to make sense of a brand.

Self-construal

Literature in self-construal distinguishes between independent and interdependent self concepts. These two self-concepts coexist across cultures and within each individual. Self-construal can be activated through situational changes (Trafimow, Triandis, and Goto 1991; Ybarra and Trafimow 1998) and is known to influence social perceptions and behaviors (Lee, Aaker and Gardner 2000; Mandel 2003; Zhang and Shrum 2009). Priming and individual's independent or interdependent self-concept influences judgments (Herr 1989; Krishna, Zhou, and Zhang 2008), information processing (Aaker and Lee 2001; Krishna, Zhou, and Zhang 2008, Kuhnen, Hannover, and Schubert 2001; Ahluwalia 2008), decision making (Mandel 2003), and choice (Bettman and Sujan 1987; Mandel and Johnson 2002).

Independent self-construals are characterized as distinct from the group, unique, and autonomous, and interdependent self-construal as part of a group, interconnected, and relationship focused (Markus and Kitayama 1991). While the principal goal of interdependents is to maintain harmony with the group, the main objective of independents is to stand out from the group (Markus and Kitayama 1991, 1994).

Social media have allowed individuals to freely express their opinions through textual comments as well as built-in platform mechanisms such as 'likes' or 'shares.' We argue that the number of times an image has been shared is a proxy for image popularity; it is a social community sign of approval for the aesthetical value of the visual stimuli posted by the brand. While the actions social group members have a powerful effect on a given member's behavior (Turner, Hogg, Oakes, Reicher and Wetherell 1987), they distinctively affect different self-concepts. Considering the distinct motivations of independent and interdependent individuals to maintain harmony or be distinct from the group, we hypothesize that self-construal will moderate the influence of the social media community behavior on the interpretation of a brand. Specifically, we hypothesize that:

H4: Interdependent social media users will weigh more heavily the associations from an image in the process of making sense of a brand when the image has generated a high number of shares (versus a low number of shares)

H5: Independent social media users will weigh more heavily the associations from an image in the process of making sense of a brand when the image has generated a low number of shares (versus a high number of shares)

Method

Pretests

The purpose of the pretests is to identify images that let us trace the transfer of associations from the images to the brand. Therefore, each image must generate unique and distinct associations. Aaker (1997) shows that brand personality is a multi-dimensional construct and identifies five orthogonal brand personality dimensions: sincere, excitement, competence, sophistication, and ruggedness. The goal of the pretests is to identify images that generate strong brand personality associations.

Pretest 1: Image identification

Members of an online panel (n=50) participated in this study in exchange for a nominal fee. The pretest was designed as a 5 (Brand personality) X 1 between-subjects study. Participants were asked to indicate the first object or image that came to mind when they read: honest and sincere, or exciting and spirited, or competent and reliable, or sophisticated and upper class, or rugged and tough. That is, an image or an object that could be defined using one set of words. Then, they received a validation code to be entered on the MTurk website.

Participants' responses are listed in Table 3. On the sophisticated & upper class and rugged & tough categories it seems to be some consensus on the images that come to mind when participants are asked to identify an object defined by the personality-related words. In the sophistication condition, black top hat, monocle and wine are common themes. In the rugged conditions, trucks and off-road vehicles seem to be strongly associated.

	Competent &	Sophisticated	Rugged &	
Sincere Spirited Relia		& Upper Class	Tough	
Monkey with	A washing	The monopoly		
cymbals	machine	guy	Boots	
People				
dancing	Teacher	Money	Truck	
Loudspeaker	My car	Monocle	boots	
Balloons	Person	Suit and a glass of wine	A large truck, like a Ford F- 250	
Lamp	A pumpkin	Crown	Tank	
Word	Computer	The monopoly man	My truck Off-road	
Horse	Vehicle	Pampered	Vehicle	
New Years Eve	Manager	Rolls Royce car	Truck tires	
	friend	Money	Carpet	
	HP laser printer	Wine glass	Atv	
		Monocle	Boot	
		A British man wearing a black top hat, monocle, dressed in a	A man with scars and a unkept beard	
	Monkey with cymbals People dancing Loudspeaker Balloons Lamp Word Horse New Years	Monkey with cymbals machine People dancing Teacher Loudspeaker My car Balloons Person Lamp A pumpkin Word Computer Horse Vehicle New Years Eve Manager My best friend HP laser	Monkey with cymbals machine guy People dancing Teacher Money Loudspeaker My car Monocle Suit and a glass of wine Lamp A pumpkin Crown The monopoly man Word Computer man Horse Vehicle Pampered New Years Eve Manager Rolls Royce car My best friend Money HP laser printer Wine glass Monocle A British man wearing a black top hat, monocle,	

Table 3. Images based on personality traits.

In addition, sophisticated and rugged personalities can be argued to be quite unique and distinct from each other, characteristics we were looking for to trace the transfer of associations from the images to the brand.

Pretest 2: Testing associations with selected images. Sophistication versus ruggedness.

The purpose of the pretest 2 is to confirm that the selected images generate the intended associations. For the sophisticated and upper class condition we chose the image of a bow tie on a white shirt. For the rugged and tough condition, we selected the picture of a trailer truck (see Figure 5).





Figure 5. Images. Sophisticated & upper class and rugged & tough conditions.

Twenty nine (n=29) members of an online panel participated in this study in exchange for a nominal fee. The pretest was designed as a 2 (Personality: Sophisticated versus Rugged) X 1 between-subjects study. Participants saw one picture and were asked to list three adjectives that would describe a brand represented by the image. Then, they completed a brand personality scale adapted from Aaker (1997). Specifically, on a 7-point Likert scale anchored "Strongly Disagree/ Strongly Agree," participants stated to what extent they would describe the personality of the

brand as: 1) sophisticated, 2) charming, 3) upper class, 4) rugged, 5) tough and 6) outdoorsy. Then, they provided demographic information and received a validation code.

Analysis of the cognitive responses supports that the bow tie and the trailer truck images represent sophisticated and rugged brands respectively. Participants who saw the bow tie picture described the brand as sophisticated, elegant, dashing, fancy, and formal. Participants who were presented with the trailer truck described the brand as tough, strong, durable, and powerful (see Figure 6).





Figure 6. Word clouds. Bow tie versus trailer truck personality associations.

The CFA analysis on the brand personality scale did not show a two-factor structure. This is not surprising given the small sample size used in the pretest. We averaged the first three items on the scale to form a Sophistication index (α = .90) and the other three items to form a Rugged index (α = .91). An independent sample t-test confirms that participants who saw the bow tie picture described the brand as more sophisticated than participants who saw the truck image ($M_{bow tie}$ = 5.93, M_{truck} = 2.98;

t(27) = 7.01, p < .001). On the other hand, participants who were presented the trailer truck picture described the brand as more rugged than participants who were presented the bow tie image ($M_{bow\,tie} = 2.13$, SD = 1.08; $M_{truck} = 6.19$, SD = .48, t(19.6) = -13.10, p < .001). A t-test conducted on the individual brand personality items shows that participants rated sophisticated items significantly higher in the bow tie than in the truck condition, and that participants rated rugged items significantly higher in the truck than in the bow tie condition. Consequently, we conclude that the selected images generate the anticipated distinct and unique brand personality associations.

Study 1

The purpose of study 1 is to investigate how social media users interpret collections of images. That is, whether the unique associations derived from each visual interact to create a hybrid brand personality. Study 1 aims to find evidence regarding hypothesis 1 (H1).

Design and sample

Members of an online panel (n=99) participated in a one-factor, between subjects experiment in exchange for a nominal fee. Specifically, study 1 is designed as a 3 (Image: Bow tie, Truck, Bow tie & Truck) X 1 experiment. Consistent with the pretests, the bow tie image represents a sophisticated brand personality, the trailer truck a rugged personality, and the bow tie and the truck together, a sophisticated-rugged hybrid brand personality.

Procedure and Stimuli

Panel members were invited to participate in an online survey about brands that took approximately 5 minutes to complete. Participants were introduced to the survey by reading the following paragraph:

"Many companies use pictures in their social media marketing communications.

These pictures may directly represent the products or services the company offers.

However, the pictures may also not be linked to products or services at all. Instead, pictures may be used to help create other types of brand beliefs, such as emotions, feelings, or images. For example, Red Bull does not manufacture skateboards but uses pictures and videos of skateboarders to communicate a young, cool, and exciting brand personality."

Participants saw one of the image conditions (see Appendix 2 for stimuli details). Then, participants responded to cognitive responses, dependent variables, manipulation checks, and demographics. Lastly, they were thanked for participating in the survey and received a validation code to be entered in the MTurk website.

Measures

Dependent measures: Brand personality and attitude towards the brand.

Dependent variables are captured on 7-point Likert scales that have "Disagree/Agree" end points. All measures are subjected to CFA and reliability analyses. The brand personality measure was adapted from Aaker (1997). Participants stated to what extent they thought the personality of the brand was 1) sophisticated, 2) upper class, 3) glamorous, 4) charming, 5) rugged, 6) tough, 7) sturdy, and 8) outdoorsy. As

anticipated, the brand personality measure shows a two-factor structure. The first four items load in one factor and are averaged to form a Sophistication index (α = .95). The other four items load on a second factor and are averaged to form a Rugged index (α = .94).

To capture attitude towards the brand (α = .84), participants showed their degree of agreement or disagreement with the following statements: 1) This brand is good, 2) I like this brand, and 3) I feel negative about this brand.

Manipulation check. In the single picture conditions, participants selected the picture they saw from 1) bow tie, 2) trailer truck, 3) hand-written letter, or 4) fireworks.

Results

Manipulation check. The manipulation check confirms that participants identified the picture they saw correctly ($\chi^2(1) = 62.00$, p < .001).

Image processing and associations transfer. Consistent with hypothesis 1 (H1), associations derived from an image transfer to the brand. When multiple pictures are presented together, the associations of both pictures interact to provide a hybrid personality that transfers to the brand. At the beginning of the survey, right after seeing the picture(s), participants were asked to list three adjectives that would describe the personality of a brand represented by the image(s). Consistent with our hypothesis, the analysis of the cognitive responses indicates that participants who saw the bow tie picture perceived the brand to be sophisticated, classy, professional, upscale, and stylish. On the other hand, participants who saw the trailer truck

described the brand as rugged, tough, strong, manly, and powerful. Participants who were presented with the bow tie picture and the trailer truck at the same time indicated that the brand was sophisticated, rugged, classy, tough, upscale and strong (see Figure 7).







Figure 7. Cognitive responses. Bow tie, trailer truck, and bow tie-trailer truck assoc.

This analysis provides evidence that when multiple pictures are presented together, unique associations from different images are pooled together to form a hybrid interpretation of the brand.

A one-way ANOVA test with the Sophistication index as the dependent variable shows a significant effect (F(2, 96) = 105.33, p <.001). The results of the post-hoc Tukey HSD tests show that all the group mean differences are significant at the .05 level. Participants in the bow tie condition rated the personality of the brand to be

more sophisticated than participants in the bow tie & truck condition ($M_{Bow \, tie} = 6.04$, $M_{Bow \, tie/\, Truck} = 4.71$, p < .001), and than participants in the truck condition ($M_{Bow \, tie} = 6.04$, $M_{Truck} = 2.39$, p < .001). In addition, participants in the bow tie & truck condition rated the personality of the brand to be more sophisticated than participants in the truck condition ($M_{Bow \, tie/\, Truck} = 4.71$, $M_{Truck} = 2.39$, p < .001). Therefore, we show the following relationship in terms of brand sophistication associations: Soph_{Bow tie} > Soph_{Bow tie + Trailer Truck} > Soph_{Truck}.

Similarly, the results of a one-way ANOVA test with Rugged_index as the dependent measure shows a significant effect (F(2, 96) = 127.72, p <.001). The results of the post-hoc Tukey HSD tests show that all the group mean differences are significant at the .05 level. Participants in the truck condition rated the personality of the brand to be more rugged than participants in the bow tie & truck condition (M_{Truck} = 6.00, $M_{Bow\ tie/Truck}$ = 4.92, p < .001), and than participants in the bow tie condition (M_{Truck} = 6.00, $M_{Bow\ tie}$ = 2.38, p < .001). In addition, participants in the bow tie & truck condition rated the personality of the brand to be more rugged than participants in the bow tie condition ($M_{Bow\ tie/Truck}$ = 4.92, $M_{Bow\ tie}$ = 2.38, p < .001). Therefore, we show the following relationship in terms of brand ruggedness associations:

 $Rugged_{Truck} > Rugged_{Bow tie + Trailer Truck} > Rugged_{Bow tie}$.

When presented with single images, participants interpreted the brand within a single personality dimension. That is, participants who saw the bow tie image rated the personality of the bran to be highly sophisticated (M_{Soph} = 6.04) but not at all rugged (M_{Rugg} = 2.38, t(32) = 18.22, p < .001). Similarly, participants who saw the trailer truck image rated the personality of the brand to be highly rugged (M_{Rugg} = 6.00) but not at

all sophisticated ($M_{Soph} = 2.39$, t(29) = -14.75, p < .001). However, when participants saw the bow tie and the trailer truck images concurrently, they interpreted the brand similarly in both personality dimensions ($M_{Soph} = 4.71$, $M_{Rugg} = 4.92$, t(35) = -.72, p > .05). Consequently, it is critical to understand how to organize visual content so it transmits the desired brand image.

Attitude towards the brand. A one-way ANOVA test with attitude towards the brand as the dependent measure does not show a significant effect ($M_{Bow \, tie} = 4.87$, $M_{Truck} = 4.89$, $M_{Bow \, tie/Truck} = 5.13$; F(2, 96) = .73, p > .05). Therefore, we rule out the possibility that the interpretation of the brand personality interferes with participant's attitude towards the brand.

Discussion

Study 1 shows that social media users interpret collections of images curated by brands and used them to form brand judgments. The results of study 1 show that social media users integrate associations from multiple images in the process of making sense of the brand. It follows, that a critical question is what social media characteristics can change the interpretation of a brand. We have established that social media users integrate associations from multiple images when making sense/understanding a brand. But do the vividness of an image or the number of responses it generates change the weight given to each image unique associations?

Study 2

The purpose of study 2 is to replicate and extend the findings of study 1. Specifically, study 2 investigates whether some 'curatorial' artifacts change the weight given to image unique associations in the process of integrating multiple visuals when making sense of a brand. That is, whether the vividness of an image or the number of times it has been shared make the personality of that image more salient in the hybrid personality of a brand. Study 2 seeks support for H1, H2 and H3.

Design and sample

Study 2 is designed as a 2 (Vividness: Low, High) X 3 (Shares: No shares, High shares, Low shares) between subjects experiment. The vividness of the images is manipulated by changing the color and the brightness of the pictures. In the low vividness condition, the image is presented in black and white. In the high vividness condition, the color and brightness are enhanced. The number of shares is manipulated using an indicator of the number of times an image has been shared below each image. In the low shares condition, the '# shares' counter equals 7; in the high shares condition, the counter equals 1,407; in the no shares condition, participants did not see an indicator. The no shares condition is considered a control.

Members of an online panel (n = 201) participated in the study in exchange of a nominal fee and were randomly assigned to one of the six experimental conditions.

Procedure and stimuli

Panel members were invited to participate in an online survey about brands and social media that took approximately 5-7 minutes to complete. Participants first read the following introduction:

"Brands are increasingly creating profiles in social media websites. Brands post pictures that they believe represent their products or that communicate some types of brand beliefs, such as emotions or feelings. For example, Red Bull does not manufacture skateboards but uses images of skateboarders to communicate a young, cool, and exciting brand personality.

Users often 'like' or 'share' pictures posted in social media sites. A "Shares" tag underneath a picture indicates the number of times that image has been shared. The number of shares is considered an indicator of image popularity.

An anonymous brand set up a social media profile and is now running a market test to understand how people just like you react. In the next page, you will see a sample of the images the brand posted two weeks ago, and the number of shares generated to date (if any). If there is no "Shares" indicator it means that the picture has not been shared. Both pictures were posted at the same time."

Then, participants saw a collection of two images. As an example, in the two control conditions participants did not see '# of shares indicators', but in the low vividness condition they saw a B/W bow tie image and a vivid truck picture; in the high vividness condition, participants saw a vivid bow tie image and a B/W truck (see Appendix 2 for stimuli details). Categorizing by image, the experimental conditions can be organized as follows:

Bow ti	e				Truck				
	Shares					Shares			
		No	Low	High			No	Low	High
Vivid	Low	Cond	Cond	Cond	Vivid	Low	Cond	Cond	Cond
		2	5	6			1	3	4
		Cond	Cond	Cond			Cond	Cond	Cond
	High	1	4	3		High	2	6	5

Table 4. Study 2 design.

For example, the collection of images below represents condition 5 (see Figure 8). If we focus on the bow tie picture, this condition represents a low vivid, low shares condition. If on the contrary, we focus on the truck image, this condition represents a high vivid, high shares condition.

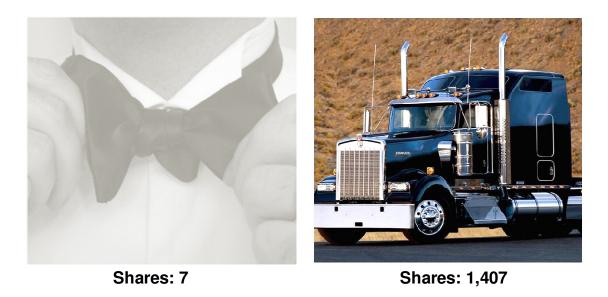


Figure 8. Experimental condition interpretation.

Immediately after participants were exposed to the collection of images, they responded to dependent variables, covariates and manipulation checks, and provided general demographic information. Then, they were thanked for their participation and received a validation code to be entered on the MTurk site.

Measures

Dependent measures: Brand personality and attitude towards the brand. Brand personality and Attitude towards the brand (α = .85) were captured as in study 1. The brand personality measure was adapted from Aaker (1997) and included four items that described a sophisticated personality (α = .90), and four items that captured a rugged personality (α = .87). The brand personality measure showed a two-factor structure.

Covariate: Familiarity with social media. To capture familiarity with social media websites (α = .87), participants stated to what extent they were 1) familiar, 2) knowledgeable, and 3) not experienced with social media (Kent and Allen 1994).

Manipulation checks: Vividness and number of shares. The vividness manipulation was assessed by asking participants to indicate what picture looked brighter from the two images they saw. They chose one of the two options: bow tie or trailer truck. The effectiveness of the '# shares' manipulation was assessed by asking participants to indicate what picture had been shared more times, the bow tie or the trailer truck. Participants in the control condition (no shares condition) did not see this question.

Results

Manipulation checks. The vividness manipulation worked as intended. A Chi-Square test between the six experimental conditions and the choice of the perceived brighter image shows a significant effect (χ^2 (5) = 178.29, p < .001). Only 3% of the sample did not select the correct option. None of the participants were eliminated from the sample. The shares manipulation worked as expected as well. A Chi-Square test between the low/high shares experimental conditions and the choice of the image that had been shared more times shows a significant effect (χ^2 (1) = 127.23, p < .001). Less than 2% of the sample failed to select the right option. Consequently, we conclude that the manipulations worked as intended.

Image processing and associations transfer. Consistent with hypothesis three (H3) the social media community influences the interpretation of visual brand profiles. The number of times and image has been shared anchors social media user's judgments about the brand. When integrating associations derived from multiple images in the process of forming a brand personality, the associations from the image that has been shared more times are more heavily weighted in the formation of the hybrid personality of the brand. On the other hand, vividness did not enhance the associations derived from an image when integrating the personality traits of the resulting brand. Therefore, hypothesis two (H2) is not supported. Focusing the analysis according to the bow tie image categorization (see Table 4), a 2 (Vividness: Low, High) X 3 (Shares: No shares, High shares, Low shares) ANOVA using sophisticated personality as the dependent variable revealed a main effect of 'Shares' (F(2, 198) = 3.15, p < .05). Pairwise comparisons show that participants in the high

shares condition perceived the brand to be more sophisticated than participants in the low shares condition ($M_{LShares} = 4.40$, $M_{HShares} = 4.93$; t(133) = -2.32, p < .05). However, participants in the high and no shares conditions perceived the brand to be equally sophisticated ($M_{NoShares} = 4.84$, $M_{HShares} = 4.93$; t(129) = -.42, p > .05). Interestingly, participants in the no shares condition perceived the brand to be more sophisticated than participants in the low shares condition ($M_{NoShares} = 4.84$, $M_{LShares} =$ 4.40; t(134) = 1.95, p = .05; d = .33). Therefore, participants' perceived levels of sophistication of the hybrid brand show the following relationship: Soph_{High Shares} = Soph No Shares > SophLow Shares. These results seem to identify an anchoring effect. While in the no shares conditions participants don't have a reference level, participants in the low shares condition are able to compare the limited popularity of an image with the rest of the visuals in the profile. The main effect of vividness (F(1, 199) = 2.85, p)>.05) or the interaction effect (F(5, 195) = .23, p >.05) were not significant. Familiarity with social media was initially included as a covariate but dropped from the analysis since it failed to reach significance (F(1, 199) = .62, p > .05).

The same 2 (Vividness: Low, High) X 3 (Shares: No shares, High shares, Low shares) ANCOVA using rugged personality as the dependent variable and familiarity with social media websites as the covariate revealed a close to significance main effect of 'Shares' (F(2, 198) = 2.73, p = .07). Results show that the size of the effect of 'Shares' on the perceived brand personality is small to medium (η^2 = .03). Therefore, even if the difference between the means is not significant, the effect of shares on the perceived brand personality should not be considered insignificant. Pairwise comparisons show that participants in the low and no shares conditions perceived the

brand to be equally rugged ($M_{NoShares} = 4.81$, $M_{LShares} = 4.90$; t(134) = -.41, p > .05). However, participants in the high shares condition perceived the brand to be less rugged than participants in the low shares condition ($M_{LShares} = 4.90$, $M_{HShares} = 4.36$; t(133) = 2.48, p < .05) and in the no shares condition (M_{NoShares} = 4.81, M_{HShares} = 4.36; t(129) = 1.89, p = .06; d= .34). Although the difference between the means in the no shares and high shares conditions is only close to significant, the effect size is considered small to medium. We make a strong case for the diagnostic value of shares. Since the conditions are categorized based on the bow tie picture, the low shares condition means that underneath the bow tie image the counter equaled 7 shares and underneath the truck image the counted equaled 1,407 shares. Therefore, consistent with our hypothesis three (H3), participants in the high shares condition perceived the personality of the brand to be less rugged than participants in the low shares condition. Participants' perceived levels of ruggedness of the hybrid brand show the following relationship: Rugged_{High Shares} < Rugged_{Low Shares} = Soph_{NoShares}. Neither the main effect of Vividness (F(1, 199) = 2.17, p > .05) or the interaction effect (F(5, 196) = 1.19, p)>.05) were significant. Again, these results identify an anchoring effect when social media users have a reference number of shares to compare the popularity of an image with.

In study 1, we found that when participants saw the bow tie and the trailer truck images concurrently, they interpreted the brand similarly in both personality dimensions (M_{Soph} = 4.71, M_{Rugg} = 4.92; t(35) = -.72, p > .05). In study 2, we find that in the no shares condition, participants interpreted the brand similarly in both personality dimensions (M_{Soph} = 4.84, M_{Rugg} = 4.81; t(65) = .13, p > .05). However, in

the low shares condition, participants interpreted the brand to be more rugged than sophisticated (M_{Soph} = 4.40, M_{Rugg} = 4.90; t(69) = -2.20, p < .05), and in the high shares condition, more sophisticated than rugged (M_{Soph} = 4.93, M_{Rugg} = 4.36, t(64) = 2.21, p < .05).

Attitude towards the brand. A 2 (Vividness) X 3 (Shares) ANOVA test with attitude towards the brand as the dependent measure did not show a significant effect of vividness (M_{Low} = 5.00, M_{High} = 5.01; F(1, 199) = .01, p > .05), shares ($M_{NoShares}$ = 5.01, $M_{LowShares}$ = 5.05, $M_{HighShares}$ = 4.95; F(2, 198) = .12, p > .05), or an interaction effect (F(5, 195) = .03, p > .05).

Discussion

Study 2 shows that the number of shares an image receives is diagnostic to form judgments about the personality of a brand. Independently of the vividness of an image (which could be argued to be an indicator of image quality), social media users anchor the interpretation of brand on the most popular image on a visual social media profile.

Study 2 provides further support for H1, showing that when social media users interpret collections of images they integrate associations from multiple stimuli. In addition, study 2 identifies a 'curatorial' artifact that changes the weight that social media users place on image associations when making sense of a brand: the number of times an image has been shared. That is, the popularity of an image among online community members.

Study 3

Study 3 is a replication and extension study. The purpose of study 3 is to investigate how individual-difference variables influence the interpretation of brands based on their visual social media profiles. Specifically, we explore how self-construal influences the processing of visual stimuli in the social media context. In study 2, we found that the popularity of an image influences how heavily it is weighted in the formation of a general hybrid brand personality. The popularity of an image is the result of the online community evaluation of the image. Research in self-construal argues that people perceive themselves in relation to the community; as independent and autonomous, or interdependent and connected to the group (Markus and Kitayama 1991). Therefore, self-construal may moderate the effect of the social media responses to an image. Study 3 is designed to test H3, H4 and H5.

Design and sample

Study 3 is designed as an extension study. Specifically, study 3 is designed as a 2 (Self-Construal: Independent, Interdependent) X 2 (Vividness: Low, High) X 2 (Shares: High, Low) between-subjects experiment. Vividness and Shares are manipulated as in study 2. The self-construal manipulation was borrowed from Aaker and Lee (2001). Participants read a stimulus about a tennis tournament that described a situation focused on the individual (independent condition) or the team (interdependent condition).

Two hundred and fifty (n = 251) undergraduate students from a U.S. University were invited to participate in an online survey in exchange of extra credit. Participants were randomly assigned to one of the eight experimental conditions.

Pretest

To confirm that the tennis tournament stimuli were still relevant and effective to manipulate self-construal, we conducted a pretest. Twenty nine (n = 29) participants were recruited from an online panel to participate in a short survey.

Participants read the independent or interdependent scenario and were asked to describe the situation facing in the tennis tournament by showing the extent to which: their thoughts1) on the situation were focused on themselves, 2) were focused on just them, 3) on the situation were focused on them and their teammates, and 4) were focused on them and their teammates. Participants responded on a 7-point Likert scale with "Disagree/ Agree" end points. Consistent with Aaker and Lee (2001), the first two items were averaged to form a Self-Thoughts index (α = .84) and the remaining two items were averaged to form an Other-Thoughts index (α = .95). In addition, participants reported how the weather was like and what was the reward for winning the championship based on the information they read on the tennis tournament scenario.

An independent t-test analysis shows the expected results. Participants in the independent self-construal condition rated SelfThoughts index higher than participants in the interdependent self-construal condition ($M_{Indep} = 6.23$, $M_{Inter} = 3.93$; t(27) = 4.84, p < .001). Also, participants in the interdependent self-construal condition rated

OtherThoughts index higher than participants in the independent self-construal condition ($M_{Indep} = 2.40$, $M_{Inter} = 5.86$; t(27) = -6.30, p < .001). An analysis of the manipulation checks indicates that participants identified the weather to be sunny and the reward for winning the game the trophy and the championship. Therefore, we conclude that participants carefully read the stimulus.

Procedure and stimuli

Participants were invited to participate in an online survey that took about 10 minutes to complete. Participants were told that they would be completing two unrelated tasks. The first task was the self-construal manipulation. Participants were asked to read a short scenario and put themselves in that situation (see stimuli details on Appendix 2). Immediately after reading the scenario, participants were asked to explain how they would feel if they (independent condition)/ their team (interdependent condition) won the game and the championship (Aaker and Lee 2001). Afterwards, they were introduced to the second task, about brands. Participants read the following introduction:

"An anonymous brand has set up a social media profile and is now running a market test to understand how people just like you react. In the next page, you will see a sample of the images the brand posted two weeks ago, and the number of times each picture has been shared to date. Both pictures were posted at the same time.

The number of shares is considered an indicator of image popularity."

Immediately after reading this introduction, participants were exposed to the vividness- shares manipulation. The vividness- shares manipulation was the same used

in study 2, except for the control conditions. That is, participants were exposed to one condition from the conditions labeled 3, 4, 5, or 6 in study 2 (see Appendix 2 for details). Then, they responded to dependent variables, covariates, and manipulation checks. Lastly, they provided general demographic information and were thanked for their participation in the study.

Measures

Dependent measures: Brand personality and attitude towards the brand. Brand personality (Soph: α = .82; Rugg: α = .77) and attitude towards the brand (α = .75) were measured as in study 2.

Covariates: Familiarity with social media. To capture familiarity with social media websites ($\alpha = .80$) participants stated to what extent they were: 1) familiar and 2) knowledgeable with social media. We dropped the third item in the scale since it made the measure not reliable ($\alpha = .69$).

Manipulation checks: Self- construal, vividness and shares. The vividness and the shares manipulation checks were captured as in study 2. Participants indicated what image looked brighter and what image had been shared more times in two multiple choice questions. The self-construal manipulation check was captured as in the study 3 pretest. The two self-related items were averaged to form a SelfThoughts index (α = .87) and the two team-related items were averaged to form an OtherThoughts index (α = .94).

Results

Manipulation checks. The vividness, shares, and self-construal manipulations all worked as expected. A Chi-Square test between the four experimental conditions and the choice of the perceived brighter image shows a significant effect (χ^2 (3) = 228.69, p < .001). Less than 1% of the sample failed to select the bow tie when the bow tie image was brighter; less than 3% of the sample failed to select the truck when the truck image was brighter. A Chi-Square test between the low/high shares experimental conditions and the choice of the image that had been shared more times shows a significant effect (χ^2 (3) = 235.62, p < .001). Less than 2% of the sample failed to select the correct option. As anticipated, in the independent self-construal condition participants had more self-related thoughts ($M_{Indep} = 5.26$, SD = 1.21; $M_{Inter} = 3.47$, SD= 1.37, t(235.29) = 10.95, p < .001) than participants in the interdependent selfconstrual condition. Participants in the interdependent self-construal condition had more other-related thoughts ($M_{Indep} = 3.91$, SD = 1.52; $M_{Inter} = 5.69$, SD = .92, t(219.34) = -11.30, p < .001) than participants in the independent self-construal condition.

Image processing and associations transfer. A 2 (Self-Construal: Independent, Interdependent) X 2 (Vividness: Low, High) X 2 (Shares: High, Low) ANOVA with sophisticated personality as the dependent variable shows a main effect of shares (F(1, 249) = 16.92, p < .001) and a close to significance self-construal X shares interaction effect (F (3, 246) = 3.89, p = .06; η^2 = .02). Participants perceived the brand to be more sophisticated when the number of shares was higher (M_{Low} = 4.59, M_{High} = 5.11). That is, the popularity of a picture among the social media community members

heightens the associations of an image when it is interpreted in a multi-stimuli context. This result replicates the findings from study 2, making a strong case for the diagnostic value of the community opinions on the interpretation of a brand. This main effect is qualified by the self-construal by shares interaction. Consistent with hypothesis four (H4), participants primed with an interdependent self construal perceived the brand to be more sophisticated in the high shares than in the low shares condition ($M_{Low} = 4.41$, $M_{High} = 5.18$; t(117) = -3.80, p < .001). However, we don't find support for hypothesis five (H5). Participants primed with an independent selfconstrual did not perceive the brand to be more sophisticated in the low shares versus the high shares condition. Independents rated the sophistication of the brand similarly in the low and high shares conditions ($M_{Low} = 4.76$, $M_{High} = 5.04$; t(130) = -1.61, p >.05). A potential explanation for the lack of support for hypothesis five (H5) is the effect of self-construal priming in modes of thinking. Literature shows that selfdefinitions influence thinking style (Kuhnen, Hannover, and Schubert 2001; Krishna, Zhou, and Zhang 2008; Ahluwalia 2008). Specifically, individuals primed with an independent self-construal are more likely to focus on the central aspects of the stimuli and ignore the context. On the other hand individuals prime with an interdependent self-construal are more likely to attend to all aspects of the stimuli. Therefore, we argue that the lack of evidence for independent self-construals to weigh more heavily the associations coming from the less popular brand in the process of integrating multiple stimuli may be due to the lack of attention to all the contextual and background information. That is, they noticed the most popular image (focal aspect of

the stimulus), but they failed to compare the low and high number of shares among images.

A 2 (Self-Construal: Independent, Interdependent) X 2 (Vividness: Low, High) X 2 (Shares: High, Low) ANOVA with rugged personality as the dependent variable shows a main effect of vividness (F(1, 249) = 5.21, p < .05), a main effect of shares (F(1, 249) = 8.18, p < .05) and a three way interaction effect (F(7, 243) = 4.90, p < .05). The main effect of shares is consistent the results we find when we use sophistication as a dependent variable and with study 2. The main effect of vividness supports hypothesis two (H2). Participants rated the personality of a brand to be more rugged when they saw a vivid truck than when the truck was in black and white ($M_{Low} = 4.26$, $M_{High} = 4.57$; t(249) = -2.30, p < .05). In this case, vividness becomes an artifact that enhances the weight given to the associations coming from a picture when the image is interpreted in the presence of multiple visual stimuli. Finally, the ANOVA test shows a 3-way interaction. However, these results are not interpretable in the context of our conceptual framework and we propose further studies as a future research idea.

Attitude towards the brand. A 2 (Self-Construal) X 2 (Vividness) X 2 (Shares) ANOVA test with attitude towards the brand as the dependent measure did not show a significant main effect of self-construal (F(1, 199) = .47, p > .05), vividness (F(1, 199) = .00, p > .05), or shares (F(1, 199) = .58, p > .05), neither any combination of two-way (p > .05) or three-way interaction effect (F(5, 195) = 1.28, p > .05).

Discussion

Study 3 replicates the strong effect of shares on the weight given to the associations of a picture in the process of integrating multiple visual stimuli. The influence of the social community is a strong 'curatorial' artifact that can be used to change the interpretation of brand visual profiles.

In addition, study 3 shows that self-construal moderates the influence of the social media community behavior on the interpretation of a brand. In the case of the sophisticated brand personalities, interdependent self-construals are shown to weight more heavily the influence of the social community opinion than independent self-construals do. When focusing on the rugged personality, the results are challenging to interpret. Although we replicate the main effect of shares, we find a main effect of vividness and a 3-way interaction effect that are not interpretable in the context of our conceptual framework and previous studies. A more detailed analysis of these results is proposed as a future research idea.

Discussion, limitations, and ideas for future research

Visual content is popular in social media; however, our understanding of how social media users interpret images and integrate and transfer their associations to the brand that created the content is not well understood. In three studies we show that social media users integrate the associations of images to form a hybrid interpretation of a brand. In study 1, we show that while social media users interpret a brand on an individual brand personality dimension when exposed to one picture, they integrate the associations from multiple images when two pictures are presented together. In

addition, study 1 shows that the weight given to the associations derived from each picture are equally weighted in the formation of an overall brand personality, a personality that we refer to as hybrid. Study 2 replicates the findings from study 1 showing that social media users indeed integrate multiple image personality associations to form a hybrid brand personality. In addition, study 2 shows that the weight given to the image associations vary as a result of the social media community opinion, operationalized here by the popularity of the image. That is, study 2 shows that the number of times an image has been shared anchors the interpretation of a brand personality. Compared to an image with lower number of shares, associations from images that show high number of shares are more heavily weighted in the interpretation of the overall brand. These results are consistent with Naylor, Lamberton, and West (2012) findings on the effect of social media users' mere visual presence. They find that passively experiencing the presence of brand supporters in social media can influence brand evaluations and purchase intent. Study 3 shows that individual difference variables - such as self-construal - moderate the effect of social media responses (i.e. shares). Study 3 shows that the effect of the social media community is more pronounced in interdependent users; that is, social media users that place strong value in community harmony and connectedness.

This manuscript contributes to the research in social media by expanding its reach to the visual communication context. To the best of our knowledge, research has not yet explored how visual communication and social media variables interact in the formation of brand judgments. From a managerial perspective, this paper contributes to the practice of brand management. Although brands control the images they share

in social media, non brand-controlled variables such as the popularity of an image enhances the impact of a specific image and may alter the interpretation of the overall brand. That is, social media users' actions are more diagnostic than marketers' actions in the interpretation of brands. Therefore, we argue that the creation of visual content should be the result of a well strategized process. Based on literature on fit effects, perceived inconsistencies between brand personality and the type of products or services it offers may lead to negative product or brand evaluations. We propose as a potential future research idea the investigation of the influence of visual social media profiles in brand and product evaluations.

We also acknowledge some limitations to our results. Some of the results obtained in study 3 are not interpretable within our conceptual framework and we propose a more in depth analysis of the effect of individual-difference variables in the processing of visual information. In addition, the images used in this manuscript are strongly positioned in two personality dimensions. For the sake of generalizability, we propose follow up experiments that use visuals strongly position in alternative brand personality dimensions (Aaker 1997). In addition, visual profiles tend to integrate a greater number of visuals. Although the purpose of this study was to establish the interaction of visual and social media variables, future studies should explore these effects is a more complex visual social media context. Lastly, visual social media websites tend to allow users to comment. A future research project should explore how social media users form judgments about brands when visuals and text interact.

References

- Aaker, Jennifer L. (1997), "Dimensions of Brand Personality," *Journal of Marketing Research*, 34 (August), 347-356.
- Aaker, Jennifer L. and Angela Y. Lee (2001), "I' Seek Pleasures and 'We' Avoid Pains: The Role of Self-Regulatory Goals in Information Processing and Persuasion," *Journal of Consumer Research*, 28 (June), 33–39.
- Acord, Sophia Krzys (2010), "Beyond the Head: The Practical Work of Curating Contemporary Art," *Qualitative Sociology*, 33, 447- 467.
- Ahluwalia, Rohini (2008), "How Far Can a Brand Stretch? Understanding the Role of Self-Construal," *Journal of Marketing Research*, 45 (3), 337-350.
- Ansari, Asim, Oded Koenigsberg and Florian Stahl (2011), "Modeling Multiple Relationships in Social Networks," *Journal of Marketing Research*, 48 (4), 713-728.
- Barasch, Alixandra and Jonah Berger (2014), "Broadcasting and Narrowcasting: How Audience Size Affects What People Share," *Journal of Marketing Research*: 51 (3), 286-299.
- Belcher, Michael (1991), Exhibitions in Museums. Leicester University Press.
- Bell, Emma and Jane Davison (2012), "Visual Management Studies: Empirical and Theoretical Approaches," *International Journal of Management Reviews*, 15 (2), 1-18.
- Berger, Jonah and Eric M. Schwartz (2011), "What Drives Immediate and Ongoing Word of Mouth?," *Journal of Marketing Research*, 48 (5), 869-880.
- Berger, Jonah and Katherine L. Milkman (2012), "What Makes Online Content Viral?," *Journal of Marketing Research*, 49 (2), 192-205.
- Berger, Jonah and Raghuram Iyengar (2013), Communication Channels and Word of Mouth: How the Medium Shapes the Message, *Journal of Consumer Research*, 40 (3), 567-579.
- Bettman, James R. and Mita Sujan (1987), "Effects of Framing on Evaluation of Comparable and Noncomparable Alternatives by Expert and Novice Consumers," *Journal of Consumer Research*, 14 (September), 141-154.
- Branthwaite, Alan (2002), "Investigating the Power of Imaginary in Marketing Communication: Evidence-Based Techniques," *Qualitative Market Research*, 5 (3), 164-171.

- Bundesen, Claus (1990), "A Theory of Visual Attention," *Psychological Review*, 97 (4), 523-547.
- Carrasco, Marisa (2011), "Visual Attention: The Past 25 Years," *Vision Research*, 51, 1484-1525.
- Chandler, Lisa (2009), "'Journey without Maps': Unsettling Curatorship in Cross-cultural Contexts," *Museum and Society*, 7 (2), 74-91.
- Chen, Yubo, Yong Liu and Jurui Zhang (2012), "When Do Third-Party Product Reviews Affect Firm Value and What Can Firms Do? The Case of Media Critics and Professional Movie Reviews," *Journal of Marketing*, 76 (2), 116-134.
- Cochoy, Franck (2012), "Modernizing the Grocery Trade with Cartoons in Wartimes. Humor as Marketing Weapon (Progressive Grocer, 1939- 1945)," in *Imagining Organizations. Performative Imagery in Business and Beyond*, ed. by Francois-Regis Puyou, Paolo Quattrone, Chris Mclean, and Nigel Thrift. Routledge
- Cohen, Geoffrey L. (2003), "Party over Policy: The Dominating Impact of Group Influence on Political Beliefs," *Journal of Personality and Social Psychology*, 85 (5), 808-822.
- Danaher, Peter J. and Tracey S. Dagger (2013), "Comparing the Relative Effectiveness of Advertising Channels: a Case Study of a Multimedia Blitz Campaign," *Journal of Marketing Research*, 50 (4), 517-534.
- Darley, John M. and Bibb Latane (1967), "Bystander Intervention in Emergencies: Diffusion of Responsibility," *Journal of Personality and Social Psychology*, 8 (4, Part 1), 377-383.
- Davison, Jane (2009), "Icon, Iconography, Iconology: Visual branding, Banking and the Case of the Bowler Hat", *Accounting, Auditing & Accountability Journal*, 22 (6), 883-906.
- Entrepreneur (2014), "The Year Ahead: 5 Social Media Trends Every Entrepreneur Needs to Know," Available at http://www.entrepreneur.com/article/232738. Accessed 6/2/2014
- Escalas, Jennifer E. (2004), "Narrative Processing: Building Consumer Connections to Brands," *Journal of Consumer Psychology*, 14 (1-2), 168-180.
- Falk, John H., Theano Moussouri and Douglas Coulson (1998), "The Effect of Visitors' Agendas on Museum Learning, *Curator: The Museum Journal*, 41 (2), 106-120.

- Feinberg, Melanie, Gary Geisler, Eryn Whitworth, and Emily Clark (2012), "Understanding Personal Digital Collections: An Interdisciplinary Exploration," *DIS '12: Proceedings of the Designing Interactive Systems Conference*, 200-209.
- Forbes (2013), "The Top 7 Social Media Marketing Trends That Will Dominate 2014," Available at http://www.forbes.com/sites/jaysondemers/2013/09/24/the-top-7-social-media-marketing-trends-that-will-dominate-2014/. Accessed 6/2/2014
- Foxbusiness (2014), "Don't Ignore These 4 Hot Social Media Trends," Available at http://smallbusiness.foxbusiness.com/marketing-sales/2014/05/29/4-hot-social-media-trends-shouldnt-ignore/. Accessed 6/2/2014
- Gabriel, Yiannis (2012), "A Picture Tells more than a Thousand Words." Losing the Plot in the Era of the Image, in *Imagining Organizations. Performative Imagery in Business and Beyond*, ed. by Francois-Regis Puyou, Paolo Quattrone, Chris Mclean, and Nigel Thrift. Routledge.
- Goldenberg, Jacob, Gal Oestreicher-Singer and Shachar Reichman (2012), "The Quest for Content: How User-Generated Links Can Facilitate Online Exploration," *Journal of Marketing Research*, 49 (4), 452-468.
- Gurian, Elaine H. (1999), "What is the Object of this Exercise? A Meandaring Exploration of the Many Meanings of Objects in Museums," *Deadalus*, 128 (3), 163-183.
- Hautz, Julia, Johann Füller, Katja Hutter and Carina Thürridl (2014), "Let Users Generate Your Video Ads? The Impact of Video Source and Quality on Consumers' Perceptions and Intended Behaviors," *Journal of Interactive Marketing*, 28 (1), 1-15.
- Heath, Christian and Dirk vom Lehn (2004), "Configuring Reception: (Dis-)Regarding the 'Spectator' in Museums and Galleries," *Theory, Culture & Society*, 21 (6), 43-65.
- Herr, Paul M. (1989), "Priming Price: Prior Knowledge and Context Effects," *Journal of Consumer Research*, 16 (June), 67–75.
- Hong, Jen-Shin, Bai-Hsuan Chen and Sheng-Hao Hung (2004), "Toward Intelligent Styling for Digital Museum Exhibitions: Modularization Framework for Aesthetic Hypermedia Presentations," *International Journal on Digital Libraries*, 4 (1), 64-68.
- Huffingtonpost (2014), "Social Media Marketing World 2014 5 Trends You want to Jump on NOW!," Available at http://www.huffingtonpost.com/kimgarst/social-media-marketing-wo b 5110966.html. Accessed 6/2/2014

- Kenney, Keith (2009), Visual Communication Research Designs. Rutledge: NY.
- Kent, Robert J. and Chris T. Allen (1994), "Competitive Interference Effects in Consumer Memory for Advertising: The Role of Brand Familiarity," *Journal of Marketing*, 58 (July), 97-105.
- Kozinets, Robert V., Andrea Hemetsberger, and Hope Jensen Schau (2008), "The Wisdom of Consumer Crowds. Collective Innovation in the Age of Networked Marketing," *Journal of Macromarketing*, 28 (4), 339-354.
- Kozinets, Robert V., Kristine de Valck, Andrea C. Wojnicki and Sarah J.S. Wilner (2010), "Networked Narratives: Understanding Word-of-Mouth Marketing in Online Communities," *Journal of Marketing*, 74 (2), 71-89.
- Krishna, Aradhna, Rongrong Zhou and Shi Zhang (2008), "The Effect of Self-Construal on Spatial Judgments," *Journal of Consumer Research*, 35 (3), 337-348.
- Kühnen, Ulrich, Bettina Hannover and Benjamin Schubert (2001), "The Semantic-Procedural Interface Model of the Self: The Role of Self-Knowledge for Context-Dependent Versus Context-Independent Modes of Thinking," *Journal of Personality and Social Psychology*, 80 (3), 397-409.
- Lee, Angela Y., Jennifer L. Aaker and Wendi L. Gardner (2000), "The Pleasures and Pains of Distinct Self-Construals: The Role of Interdependence in Regulatory Focus," *Journal of Personality and Social Psychology*, 78 (6), 1122-1134.
- Lord, Barry and Bail Dexter Lord (2001), *The Manual of Museum Exhibitions*, Altamira Press, Walnut Creek, California, USA.
- Ludwig, Stephan, Ko de Ruyter, Mike Friedman, Elisabeth C. Brüggen, Martin Wetzels and Gerard Pfann (2013), "More Than Words: The Influence of Affective Content and Linguistic Style Matches in Online Reviews on Conversion Rates," *Journal of Marketing:* 77 (1), 87-103.
- Luo, Xueming, Sascha Raithel, and Michael A. Wiles (2013), "The Impact of Brand Rating Dispersion on Firm Value," *Journal of Marketing Research*, 50 (3), 399-415.
- Lutz, Kathy A. and Richard J. Lutz (1978), "Imagery-Eliciting Strategies: Review and Implications of Research," in *Advances in Consumer Research*, Vol. 5, ed. H. Keith Hunt, Ann Arbor, MI: Association for Consumer Research, 611- 620.
- Macdonald, Sharon (2007), "Interconnecting: Museum Visiting and Exhibition Design," *CoDesign: International Journal of CoCreation in Design and the Arts*, 3 (1), 149-162.

- Mandel, Naomi (2003), "Shifting Selves and Decision Making: The Effects of Self-Construal Priming on Consumer Risk-Taking," *Journal of Consumer Research*, 30 (January), 30-40.
- Mandel, Naomi and Eric J. Johnson (2002), "When Web Pages Influence Choice: Effects of Visual Primes on Experts and Novices," *Journal of Consumer Research*, 29 (September), 235-245.
- Markus, Hazel and Shinobu Kitayama (1991), "Culture and the Self: Implications for Cognition, Emotion and Motivation," *Psychological Review*, 98 (2), 224-253.
- Markus, Hazel and Shinobu Kitayama (1994), "A Collective Fear of the Collective: Implications for Selves and Theories of Selves," *Personality and Social Psychology Bulletin*, 20 (5), 568-579.
- Mashable (2014), "9 Ways Social Media Marketing Will Change in 2014," Available at http://mashable.com/2014/01/27/social-media-marketing-2014/. Accessed 6/2/2014
- McLean, Kathleen (1999), "Museum Exhibitions and the Dynamics of Dialogue," *Deadalus*, 83, 83-107.
- Mitchell, W. J. T. (2005), *What do Pictures Want?*, Chicago and London: The University of Chicago Press.
- Moser, Stephanie (2010), "The Devil is in the Detail: Museum Displays and the Creation of Knowledge," *Museum Anthropology*, 33 (1), 22-32.
- Naylor, Rebecca Walker, Cait Poynor Lamberton, and Patricia M. West (2012), "Beyond the 'Like' Button: Exploring the Effects of Mere Virtual Presence on Brand Evaluation," *Journal of Marketing*, 76 (November), 105-120.
- Patience, Kaitlyn (2010), "Hysterical Spaces: Curatorship and Meaning in the Traveling Exhibition: A Case Study of the National Gallery of Canada's "Hysteria and the Body," *SHIFT: Graduate Journal of Visual and Material Culture*, 3, 1-23.
- Patrick, Vanessa M. and Henrik Hagtvedt (2011), "Aesthetic Incongruity Resolution," *Journal of Marketing Research*, 48 (2), 393-402.
- Potter, John, Banaji, Shakuntala (2012), "Social Media and Self-curatorship: Reflections on Identity and Pedagogy through Blogging on a Masters Module," *Comunicar*, 38, 83-91.
- Puwar, Nirmal and Sanjay Sharma (2012), "Curating Sociology," *The Sociological Review*, 60, 40-63.

- Ransbotham, Sam, Gerald C. Kane and Nicholas H. Lurie (2012), "Network Characteristics and the Value of Collaborative User-Generated Content," *Marketing Science*, 31 (3), 387-405.
- Schroeder, Jonathan E. (2004), "Visual Consumption in the Image Economy", In: *Elusive Consumption*, edited by Karin M. Ekström and Helene Brembeck. Berg: NY.
- Schweidel, David A. and Wendy W. Moe (2014), "Listening in on Social Media: A Joint Model of Sentiment and Venue Format Choice," *Journal of Marketing Research* In-Press.
- Singh, Sangeeta and Stephan Sonnenburg (2012), "Brand Performances in Social Media," *Journal of Interactive Marketing*, 26 (4), 189-197.
- Smith, Andrew N., Eileen Fischer and Chen Yongjian (2012), "How Does Brandrelated User-generated Content Differ across YouTube, Facebook, and Twitter?," *Journal of Interactive Marketing*, 26 (2), 102-113.
- Smith, Andrew T., Krish D. Singh and Mark W. Greenlee (2000), "Attentional Suppression of Activity in the Human Visual Cortex," *NeuroReport*, 11 (2), 271-277.
- Socialmediaexaminer (2014), "New Research Shows Which Social Networks are Ideal for Marketers," Available at http://www.socialmediaexaminer.com/new-research-shows-social-networks-ideal-marketers/. Accessed 6/2/2014
- Spencer, Stephen (2011), Visual Research Methods in the Social Sciences, London: Routledge.
- Sridhar, Shrihari and Raji Srinivasan (2012), "Social Influence Effects in Online Product Ratings," *Journal of Marketing*, 76 (5), 70-88.
- Stephen, Andrew T. and Jeff Galak (2012), "The Effects of Traditional and Social Earned Media on Sales: A Study of a Microlending Marketplace," *Journal of Marketing Research*, 49 (October), 624-39.
- Thompson, Debora V. and Prashant Malaviya (2013), "Consumer-Generated Ads: Does Awareness of Advertising Co-Creation Help or Hurt Persuasion?," *Journal of Marketing*, 77 (3), 33-47.
- Trafimow, David, Harry C. Triandis and Sharon G. Goto (1991), "Some Tests of the Distinction Between the Private Self and the Collective Self," *Journal of Personality and Social Psychology*, 60 (5), 649-655.
- Trusov, Michael, Randolph E. Bucklin and Koen Pauwels (2009), "Effects of Word-of-Mouth Versus Traditional Marketing: Findings from and Internet Social Networking Site," *Journal of Marketing*, 73 (September), 90-102.

- Turner, John C., Michael A. Hogg, Penelope J. Oakes, Stephen D. Reicher and Margaret S. Wetherell (1987), *Rediscovering the social group: A self-categorization theory*. Cambridge, MA, US: Basil Blackwell.
- Warren, Samantha and Russ Vince (2012), "Qualitative, Participatory Visual Methods". In: *The Practice of Qualitative Organizational Research: Core Methods and Current Challenges*. Sage.
- Wilcox, Keith and Andrew T. Stephen (2013), "Are Close Friends the Enemy? Online Social Networks, Self-Esteem, and Self-Control," *Journal of Consumer Research*, 40 (1), 90-103.
- Woodside, Arch G. (2010), "Brand-Consumer Storytelling Theory and Research: Introduction to a *Psychology & Marketing* Special Issue," *Psychology & Marketing*, 27 (6), 531-540.
- Ybarra, Oscar and David Trafimow (1998), "How Priming the Private Self or Collective Self Affects the Relative Weights of Attitude and Subjective Norms," *Personality and Social Psychology Bulletin*, 24 (4), 362-370.
- Zhang, Yinlong and L. J. Shrum (2009), "The Influence of Self-Construal on Impulsive Consumption," *Journal of Consumer Research*, 35 (5), 838-850.

APPENDIX 1

Study 1 stimuli

Condition 1: Traditional media (corporate advertisement) – CA message

Atlantic Crowdsourcing offers tasks adapted to your interests and skills. Our algorithms optimize the presentation of the tasks so they are relevant and fit your interests. Since 2000, our annual investments in R&D exceed the industry average. Atlantic Crowdsourcing servers use the latest Xeon E7-4800 v2 chips that stress inmemory computing that bring you seamless experiences. Our reliable IT administrators collect metrics to identify, diagnose, and immediately fix performance issues in the site. Atlantic Crowdsourcing robust technology allows our developers to focus on innovative site design. In fact, we were recently ranked in the Top 5% of U.S. Crowdsourcing companies in innovation by the Wall Street Journal.

Condition 2: Traditional media (corporate advertisement) – CSR message

Atlantic Crowdsourcing mission is to be an ethical company, which conducts business with honesty and integrity. Employees as well as task requesters pass strict standards of integrity before joining Atlantic Crowdsourcing. We pride ourselves on our leadership in ethical business and labor practices. In fact, we were recently ranked in the Top 5% of U.S. Crowdsourcing companies practicing ethical business policies by the Wall Street Journal. Atlantic Crowdsourcing gives its employees flexibility to volunteer in their communities and make a difference. In addition, we support important charities. We give a percentage of our revenues to charities such as the Free Software Foundation and the LaborNet Group.

Condition 3: Social media (blog posting) – CA message

After using Atlantic Crowdsourcing, I must say that they offer tasks adapted to my interests and skills. In my experience, their algorithms optimized the presentation of the tasks so they were relevant and interesting to me. This is probably explained by their annual investments in R&D that have exceeded industry average since 2000. Also, I truly believe that the use of the latest Xeon E7-4800 v2 chips in their servers provide seamless experiences. Their IT administrators probably collect metrics to identify, diagnose and immediately fix performance issues because I never experienced any problems. I think their robust technology allows their developers to focus on the innovative site design. No wonder why they are ranked in the Top 5% of the U.S. Crowdsourcing companies in innovation by the Wall Street Journal.

Condition 4: Social media (blog posting) – CSR message

After using Atlantic Crowdsourcing, I must say that they are ethical and conduct business with honesty and integrity. This is probably due to the fact that employees and task requesters pass the same strict standards of integrity before joining the company or the site. In my opinion, they are leaders when it comes to ethical business and labor practices. No wonder why they are ranked in the Top 5% of U.S. companies practicing ethical business policies by the Wall Street Journal. Something I really like about Atlantic Crowdsourcing is that the company gives its employees flexibility to volunteer in their communities making a difference. Also, what really sold me was that they support important charities by giving a percentage of their revenues to charities as the Free Software Foundation and the LaborNet Group.

Study 2 stimuli

Condition 1: Traditional media (corporate advertisement) – CA message

Atlantic Finance is committed to offering you the highest quality and performance products and services. Atlantic Finance offers customized financial plans adapted to your income and personal situation. Our clients range from new investors who are just starting in the market to sophisticated investors with large portfolios. Our mutual funds are all ranked in the top 5% in 10-year aggregate returns, outperforming even powerful fund companies like Fidelity Investments and the Dow Jones Index.

Atlantic Finance invests in the latest technology to construct complex financial models that help our staff provide extraordinary financial advice. Since 2000, our annual profitability consistently exceeds the industry average. We hire only friendly and professional financial advisers, who are trained to understand your questions, problems, and concerns so you never experience any problems. In fact, we are ranked in the Top 5% of U.S. Financial Services Companies in customer satisfaction by the Wall Street Journal.

Condition 2: Traditional media (corporate advertisement) – CSR message

Atlantic Finance is committed to conducting ethical business practices and supporting charitable causes. Atlantic Finance mission is to be an ethical company, which conducts business with honesty and integrity. We hire only those people who pass strict standards of integrity. We pride ourselves in our leadership in ethical business and labor practices. In fact, we are ranked in the Top 5% of U.S. companies practicing ethical business policies by the Wall Street Journal. We give our employees

flexibility to volunteer for their favorite local and community charities making a difference. Our employees take 4 hours off of their work weeks to contribute to the community. In addition, Atlantic Finance supports important charities voted on by employees. We give a percentage of our total revenues to charities that are active in our communities such as the LaborNet Group and Communities in Schools, and sponsor local youth sports teams, theater, and music.

Condition 3: Social media (blog posting) – CA message

After having used their services, I must say that Atlantic Finance is committed to offering the highest quality and performance products and services. They offer customized financial plans adapted to my income and personal situation. I am a new investor starting in the market, but they also work with sophisticated investors with large portfolios. From what I have seen, their mutual funds are ranked in the top 5% in 10-year aggregate returns, and outperform powerful fund companies like Fidelity Investments and the Dow Jones Index. In my experience, their staff provides me with extraordinary financial advice. This is probably explained by their investments in the latest technology to construct complex financial models. I chose their financial plans because I truly believe that since 2000, their annual profitability consistently exceeds the industry average. In my experience, their financial advisers are friendly, professional, and understand my questions. I have never experienced any problems. No wonder why they are ranked in the Top 5% of U.S. Financial Services Companies in customer satisfaction by the Wall Street Journal.

Condition 4: Social media (blog posting) – CSR message

After having used their services, I must say that Atlantic Finance is committed to conducting ethical business practices and supporting charitable causes. They are ethical and conduct business with honesty and integrity. This is probably because their employees pass strict standards of integrity before joining the company. In my opinion, they are leaders when it comes to ethical business and labor practices. No wonder why they are ranked in the Top 5% of U.S. companies practicing ethical business policies by the Wall Street Journal. Something I really like about Atlantic Finance is that it gives the employees flexibility to volunteer for their local and community charities making a difference. From what I know, employees take 4 hours off of their work weeks to contribute to the community. Also, what really sold me was that Atlantic Finance supports important charities in their communities voted on by employees by giving a percentage of their revenues. They make donations to charities such as the LaborNet Group and Communities in Schools, and support local youth sports teams, theater, and music.

APPENDIX 2

Study 1 stimuli

Condition 1: Bow tie (sophistication)



Condition 2: Trailer truck (ruggedness)



Condition 3: Bow tie and trailer truck (sophistication + ruggedness)





Study 2 stimuli

Condition 1: Bow tie high vivid, no shares. Truck low vivid, no shares





Condition 2: Bow tie low vivid, no shares. Truck high vivid, no shares





Condition 3: Bow tie high vivid, high shares. Truck low vivid, low shares





Shares: 1,407 Shares: 7

Condition 4: Bow tie high vivid, low shares. Truck low vivid, high shares





Shares: 7 Shares: 1,407

Condition 5: Bow tie low vivid, low shares. Truck high vivid, high shares





Shares: 7 Shares: 1,407

Condition 6: Bow tie low vivid, high shares. Truck high vivid, low shares





Shares: 1,407 Shares: 7

Study 3 stimuli

Condition 1: Independent self-construal

You are playing in a tennis tournament and have made it to the finals. It is 4:26 pm, and the sun is beating down on you. You can count the strings on your racquet and bounce the ball on your racquet a few times, thinking to yourself: If you win this last match, you will win the championship title and bring home the huge trophy.

Condition 2: Interdependent self-construal

Your team is playing in a tennis tournament and has made it to the finals. It is 4:26 pm, and the sun is beating down on your team. You are representing your team in the finals. You can count the strings on your racquet and bounce the ball on your racquet a few times, thinking to yourself: If you win this last match, your team will win the championship title and bring home the huge trophy.