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The effect of social media on purchasing behavior

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ABSTRACT

Social media is a rapidly growing method of both business and personal communication. Increasingly, businesses are recognizing the importance of this growing market, and are adding social media efforts to their marketing campaigns. However, despite the boom in use, marketers still struggle with determining the return on investment (ROI) of social media. The challenge of quantifying ROI has broader implications than purely academic research; last year advertisers worldwide spent \$23.68 billion on social networks according to eMarketer.com (2016). In this article we will explore the impact of social media on purchasing behavior as a measure of ROI.

KEYWORDS: social media, ROI, consumer behavior, purchasing behavior, and return on marketing investment

INTRODUCTION

Social media is a rapidly growing method of both business and personal communication. Increasingly, businesses are recognizing the importance of this growing market, and are adding social media efforts to their marketing campaigns. A 2012 survey of 3,800 small and medium sized organizations reported that 85 percent of marketers believe that social media helps small and medium sized organizations generate more awareness of their business and 69 percent of marketers believe social media helps drive consumer traffic (Stelzner, 2012). As Wallace (2012), notes in *Agency Sales Magazine*, "Consumers are already talking, so you might as well join the conversations." Indeed, not only are consumers already engaging on social media, they *expect* companies to be a part of the conversation. One survey indicated that 93 percent of consumers believe that a company should have some kind of social media presence and 85 percent of consumers expect companies and organizations to also interact with customers through social media (Cone 2008).

However, despite the boom in use, marketers still struggle with determining the return on investment (ROI) of social media while print and broadcast media have decades of research quantifying their ROI. The challenge of quantifying ROI has broader implications than purely academic research; last year advertisers worldwide spent \$23.68 billion on social networks, a 33.5% increase from 2014 according to eMarketer.com (2016). However, despite companies' increasing focus on social media marketing, many organizations still struggle with understanding how to quantify their efforts. "In spite of the apparent attractiveness of investing in social media advertising, many companies are still challenged by their inability to determine the financial performance of social media activities in terms of financial return on investment (Jobs 2014)." Print and broadcast media has decades of research focused on ROI, however, due to the relatively new nature of the medium; there is still no widely accepted method of measurement for social media. Academic literature to date has tried, with varying degrees of success to create a standard ROI measurement tool. Jobs and Gilfoil (2014), for instance,

endorse a reallocation of current advertising spend to social media, with a 30 percent diversion of funds being the recommended starting point. Other academic literature has tried to adapt traditional media ROI measurements to social media, which as Fisher (2009) notes, is a flawed method, “nothing ... has really told me about anything other than new media versions of traditional media campaigns: where to place your ad, sponsored widget or sponsored conversation, and how to judge its effectiveness. How about real social media, finding out how your forum is contributing to your reduction in online support, how customer reviews are affecting sales path, whether your 30 second TV spot crowdsourced in an innovative user generated content (UGC) campaign really made your audience feel engaged?” With so many dollars being spent annually, marketers, CEOs, and shareholders must justify the efforts of social media marketing and be able to accurately and easily define a successful campaign. One way to answer the question currently plaguing the industry and fill a gap in the current literature is to use purchasing behavior as a measure of ROI for social media.

It is clear that while traditional methods of measuring ROI can inform the measurement of ROI in social media, they are not robust enough to capture and analyze the many factors influencing social media. Instead, we must utilize additional theories to successfully define ROI in social media. Purchasing behavior serves as an effective measurement of ROI because, according to Khaniwale, it is one of the greatest predictors of current and future sales.

Consumer purchasing behavior “is very important in the marketing field as it forms the basis of marketing strategies. The study of consumer buying behavior facilitates to comprehend the concern such as what the buyers think, what their feelings are, what the reasons behind their decision are, and how they pick among several options...Having an insight into these factors enables marketers to better know and predict not only the demand of their product or service, but also the purchasing motives and purchasing frequency of the product or service. More importantly, if these factors are considered whilst developing new products, it will support in developing products with higher probability of success (Khaniwale, 2105).

Utilizing purchasing behavior as a measure of ROI is important given its implications in predicting present and future sales, thus impacting an organizations' bottom line.

Last year a McKinsey study (Bughin, 2015) indicated that, “social media recommendations induced an average of 26 percent of purchases across all product,” and “in 2014, consumers made 10 percent more purchases on the back of social-media recommendations than they had in 2013.” Additionally, in an extensive literature review examining more than 100 articles on consumer online purchasing intentions, Akar and Nasir (2015) noted that social media created a significant positive impact on purchasing behavior. Yet, the authors note, “the study results reveal that while most of the studies focus on the impact of consumer characteristics, and merchant and product characteristics on online purchase intention, the impact of social media is generally underestimated in the literature.” Purchasing behavior directly affects sales, and therefore directly impacts a company's bottom line. Understanding the influence of social media on purchasing behavior is imperative to successfully measuring the ROI of a company's social media campaign.

Social media as a method of marketing and communication continues to grow in business, yet social media ROI is a field of research that is still in development and without clear best practices. Purchasing behavior is as a strong measure of ROI in social media because of its power to predict current and future sales. However, existing literature does little to explain or explore social media's impact on consumer purchasing behavior. Utilizing purchasing behavior as a measure of ROI will fill this gap in the literature and offer a useful tool for companies in their marketing and measurement efforts of social media.

In this study we will explore the impact of social media on purchasing behavior as a measure of ROI. In order to do this, we will construct a research model, conduct a survey of social media users, compile and analyze the data, and make recommendations for how

companies and organizations can begin to adequately measure social media ROI. The following segments of the article are organized as such, Research Model, Methodology, and Conclusion.

THEORETICAL DEVELOPMENT/MODEL

To successfully measure social media's effect on purchasing behavior we must first define what factors impact ROI in marketing, purchasing behavior, and social media. Although print and broadcast media have decades of research quantifying their ROI, social media, a relatively new channel for marketing, has not benefited from the same level of scholarly study. One reason for this discrepancy in research is that social media as a medium has only existed for a little more than a dozen years, with MySpace.com launching as recently as 2003.

Return on Marketing Investment (ROMI) is defined as revenue generated by a marketing program divided by the cost of the program at a given risk level (Powell, 2002). However, this financial measure is not always a clear metric for many organizations. Fortunately, ROMI is a field of deep research with entire conferences and publications dedicated to measuring it, and a proliferation of metrics have arisen out of the many attempts to create ROMI measurement tools. "In an ARF-Association of National Advertisers survey of senior marketers in 2000, marketers reported a wide range of metrics that were in use in their companies. Some of the measures were quite far removed from sales but had been related to sales in previous analyses, tracking measures such as awareness of the brand or of the advertising, for example. Others were profitability and payout measures that were familiar to finance managers as well as marketers (Cook, 2004)." According to Kitsikeas, Constantine, et al., there are six key measures and impacts of ROI in marketing, as defined below (Katsikeas, Constantine S., et al., 2016).

1. Customer mindset outcomes—customer perceptions and attitudes regarding the firm and its value offering (e.g., brand equity, customer satisfaction);
2. Customer behavior outcomes customer purchase and post purchase behaviors toward the firm and its value offerings (e.g., customer retention, word of mouth);
3. Customer-level performance outcomes—economic outcomes for the firm that concern the behavior of individuals or groups of customers (e.g., customer profitability, CLV);
4. Product market performance outcomes—how the product performs in the marketplace in which it is offered (e.g., unit sales, market share);
5. Accounting performance outcomes—financial outcomes reported in the firm's financial statements and reports (e.g., profitability, return on assets [ROA]); and
6. Financial-market performance outcomes—outcomes reflected in indicators related to stock or debt markets (e.g., total shareholder returns, bond ratings). We use these categories to capture the aspects of marketing performance used in empirical studies.

For the purposes of this paper, these measures provide a helpful framework for examining return on investment in marketing.

In order to run and measure a successful marketing campaign, marketers must first understand consumer behavior; why customers are viewing the company's information and purchasing its products. In fact, consumer behavior models are built on the foundation of these two principles: getting information and product purchasing (Pavlou, Fygenson, 2006). For example, the model of the customer resource life cycle (CRLF) proposed by Ives and Learmonth (1984) centers on three key stages: prepurchase (information gathering), during purchase, and post-purchase. Additionally, Kalakota and Whinston (1997) endorse a three-step model also built upon similar steps: prepurchase interaction (information gathering), purchase, and post-purchase interactions. In each of these models of consumer behavior, purchasing is foundational to successfully understanding consumer behavior. In this paper, we will use purchasing behavior as the lens through which we explore consumer behavior, however, first we must define the factors influencing purchasing behavior. In a 2013 literature review of

purchasing behavior research, Shafi compiled the following exhaustive list of all the factors influencing consumer-purchasing behavior (Shafi, 2013):

- Personal factors—occupation, economic situation, personality, lifestyle, etc.
- Social factors—reference groups, family and social roles and status
- Physical factors—atmospherics of the shopping experience
- Marketing mix—mix of the controllable elements of a product's marketing plan
- Environmental factors—factors making up the retail environment
- Cultural factors—established beliefs, values, traditions
- Attitudinal factors—attitude of customer
- Demographic factors—gender, race, age, etc.

As social media use grows, so does its influence on consumer purchasing behavior. Last year a McKinsey study indicated that, “social media recommendations induced an average of 26 percent of purchases across all product,” and “in 2014, consumers made 10 percent more purchases on the back of social-media recommendations than they had in 2013 (Bughin, 2015).” Because of this increase in influence, marketers continue to invest in social media channels, however measuring the effectiveness of these efforts plagues the industry. To fully understand the impact of social media on purchasing behavior, we must first understand what factors impact consumer’s social media perceptions and interactions. According to Kumar’s research, there are a number of variables impacting customer’s social media interactions (Kumar, 2016).

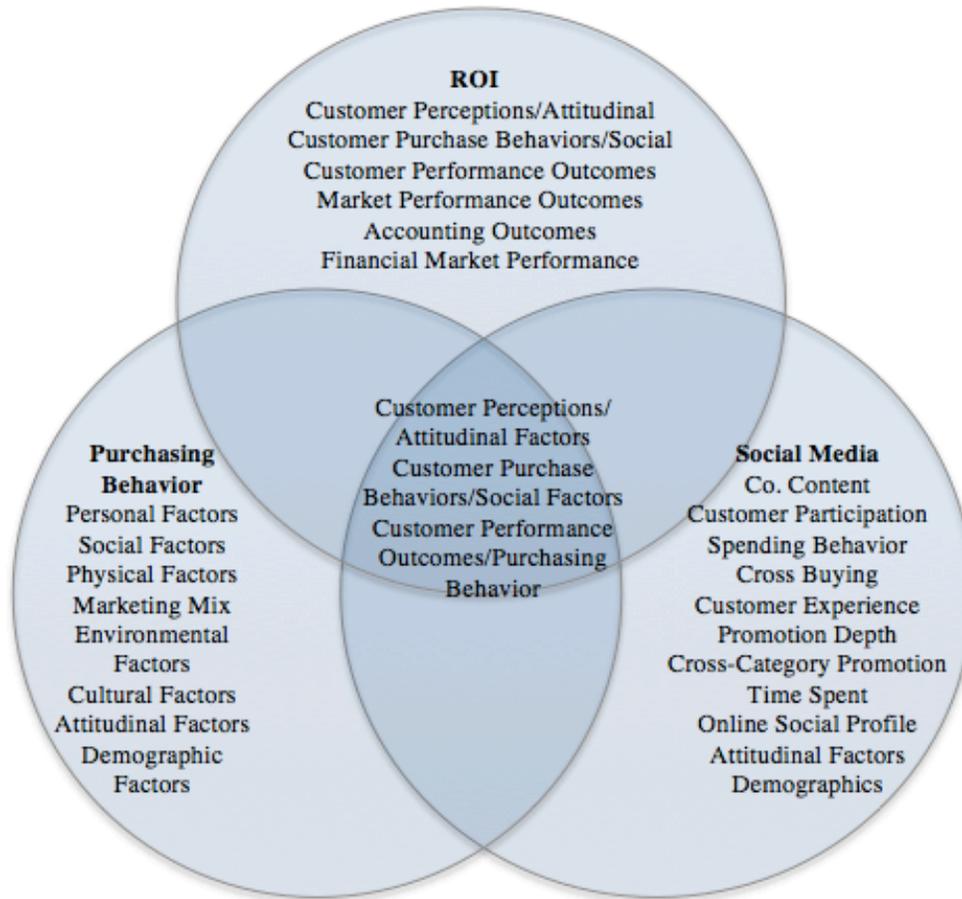
- Firm generated social media content—messages posted by the firm
- Customer participation in social media—participation in firm’s social media page
- Spending behavior—total dollar amount spent by customer
- Cross buying behavior—total number of distinct categories customer purchased during week
- Customer experience—duration of the relationship of customer with the firm
- Promotion depth index—weighted average of price cuts availed by customer
- Cross-category promotion—proportion of categories bought on promotion by customer
- Time spent on social network—time spent by customers on social networks
- Online social profile—number of online social profiles
- Attitudinal variables—attitude constructs measured by survey instrument
- Demographics—gender, race, age, etc.

When we overlay these three factors, we identify three key intersections, as identified in Figure 1. We can then use these intersections, Customer Perceptions/Attitudinal Factors, Customer Purchase Behavior, and Customer Performance Outcomes/Purchasing Behavior (defined below), as a foundation to examine how social media is affecting consumer purchasing behavior in terms of marketing ROI.

For the purposes of this study, we will explore these intersections, identified as:

- Customer Perceptions/Attitudinal Factors—customer perceptions and attitudes regarding the firm and its value offering (e.g., brand equity, customer satisfaction);
- Customer Purchase Behaviors/Social Factors— Customer behavior outcomes customer purchase and post purchase behaviors toward the firm and its value offerings (e.g., customer retention, word of mouth);
- Customer Performance Outcomes/Purchasing Behavior— Customer-level performance outcomes—economic outcomes for the firm that concern the behavior of individuals or groups of customers (e.g., customer profitability, spending behavior).

Figure 1.



METHODOLOGY

Social media users are a wide and varied audience. Research indicates that social media users with common social characteristics (e.g. age, gender, etc.) tend to behave similarly on social media. Additionally, studies have also demonstrated that social media affects purchasing behaviors differently, depending on the group that is being studied. Market segmentation theory presents an accepted and well-established method to study these behavioral differences. Market segmentation, a concept rooted in economic pricing theory, suggests that marketing efforts are most effective when messages are targeted to discreet audiences, "Grouping together customers with similar product preferences and buying behaviour aids organisations in dealing with market heterogeneity, thereby focusing resources on relatively homogeneous customer segments and thus ensuring an efficient allocation of resources (Venter, 2015)." While 93 percent of consumers expect marketers to be online, consumer market segments have varying degrees of interaction with social media and social media has varying levels of impact on their purchasing behavior. However, according to Canhato, Clark, and Fennemore (2013), market segmentation is still a valid practice in the changing landscape of social media. By allowing customers to self-select into interest groups, social media organically creates market segments. Using these self identified groups, marketers can gather more specific market research and feedback from targeted audiences of consumers.

Because social media allows companies to gain more meaningful insight into customer opinions and encourages customers to self-select into online communities of interest, market segmentation theory provides a helpful lens for examining a companies social media efforts.

Because of the nature of this study, the market segment selected for research must be comprised of both heavy users of social media and customers who engage in online purchasing. Americans over 50, colloquially known as “Baby Boomers” are the ideal market for this research. Boomers are targeted by just 10% of marketing campaigns, however, this market segment actually accounts for half of all consumer spending. Although much research has been focused on the coveted 18-35 year old demographic, Boomers outspend this segment by 2:1 online (Love, 2014). In fact, McClullen (2015) argues that Boomers should be a target for all marketers, “Boomers are prolific online shoppers. According to Nielsen, a third of them shop online and the 50+ segment spends almost \$7 billion in ecommerce... Forrester Research found that 72% of adults aged 55-to-63 shop online.” Given their online purchasing power, Boomers are a useful segment for study when examining purchasing behavior.

Additionally Boomers are also heavy users of social media. “According to globalwebindex, 70% of online Baby Boomers have a Facebook account. Boomers spend an average of 216 minutes per day on social media. In their use of technology, the youngest Baby Boomers (ages 45-55) are nearly as likely to be online (and to have a home broadband connection) as younger adults (Mander, 2014).” McCullen goes on to point out that Boomers are the fastest growing demographic among social media users, with half actively engaging on social media, “Since 2008, younger Boomers (ages 46-55) usage on social media grew by 150%, which is more rapid than the growth for any other generation. (2015).”

To effectively study the baby boomer market segment, we will conduct both qualitative and quantitative analysis. To begin, we will conduct focus groups comprised of baby boomers that are active social media users. In these focus groups we will ascertain more information on the baby boomer’s use of social media, purchasing behaviors, and interactions with online brands. We will ask them about their online behaviors, preferences, social media channels of choice, and spending behaviors. These learnings will then be used to compile a survey instrument that adequately captures the complexity of the interaction between social media and purchasing behavior. Additionally, the focus groups will help us to ascertain the language and knowledge level of the identified population, ensuring that our survey is relatable to the audience. We will then locate our survey population by purchasing lists through marketing services and partnering with local AARP branches to distribute an electronic survey through their social media channels. This mixed methods approach will ultimately enhance the quality of our findings.

Because of their strong purchasing power, propensity to shop online, and heavy social media use, Baby Boomers are an ideal market segment for studying the impact of social media on purchasing behavior. Utilizing market segmentation theory, this article will examine how companies’ social media marketing efforts affect baby boomer’s purchasing behavior.

CONCLUSION

Purchasing behavior is as a strong measure of ROI in social media because of its power to predict current and future sales. However, existing literature does little to explain or explore social media’s impact on consumer purchasing behavior. Utilizing purchasing behavior as a measure of ROI will fill this gap in the literature and offer a useful tool for companies in their marketing and measurement efforts of social media. With the identified framework, we define and explore the factors impacting purchasing behavior in regards to social media. Understanding social media’s effect on purchasing behavior will allow marketers to implement successful ROI measurement strategies surrounding social media marketing efforts.

REFERENCES

- Akar, Ezgi, and V. Aslihan Nasir. "A Review Of Literature On Consumers' Online Purchase Intentions." *Journal Of Customer Behaviour* 14.3 (2015): 215-233. *Business Source Complete*. Web. 21 Feb. 2016.
- Bughin, Jacques. "Getting A Sharper Picture Of Social Media's Influence." *Mckinsey Quarterly* 3 (2015): 8-11. *Business Source Complete*. Web. 21 Feb. 2016.
- Canhoto, Ana Isabel, Moira Clark, and Paul Fennemore. "Emerging Segmentation Practices In The Age Of The Social Customer." *Journal Of Strategic Marketing* 21.5 (2013): 413-428. *Business Source Complete*. Web. 13 Feb. 2016.
- Cone Business. (2008). 2008 business in social media study. Retrieved from <http://www.coneinc.com/news/request.php?id=1183>
- Cook, William A. "ROMI Outlay Brings High Yields To B-To-B Marketers." *B To B* 89.4 (2004): 26. *Business Source Complete*. Web. 25 Mar. 2016.
- Cronin, John J. "Teaching ROI Analysis In An Era Of Social Media." *Journal Of Advertising Education* 18.2 (2014): 28-35. *Business Source Complete*. Web. 19 Mar. 2016.
- Fisher, Tia. "ROI In Social Media: A Look At The Arguments." *Journal Of Database Marketing & Customer Strategy Management* 16.3 (2009): 189-195. *Business Source Complete*. Web. 13 Feb. 2016.
- Powell, Guy R. *Return on Marketing Investment: Demand More from Your Marketing and Sales*. 2002. Print.
- Ives, Blake, and Gerard P. Learmonth. "The Information System As A Competitive Weapon." *Communications Of The ACM* 27.12 (1984): 1193-1201. *Business Source Complete*. Web. 25 Mar. 2016.
- Jobs, Charles G., and David M. Gilfoil. "A Social Media Advertising Adoption Model For Reallocation Of Traditional Advertising Budgets." *Academy Of Marketing Studies Journal* 18.1 (2014): 235-248. *Business Source Complete*. Web. 13 Feb. 2016.
- Kalakota, Ravi, and Andrew B. Whinston. *Electronic Commerce: A Manager's Guide*. Reading, MA: Addison-Wesley, 1997. Print.
- Khaniwale, Manali. "Consumer Buying Behavior." *International Journal of Innovation and Scientific Research* 14.2 (2015): 278-86. Print.
- Katsikeas, Constantine S., et al. "Assessing Performance Outcomes In Marketing." *Journal Of Marketing* 80.2 (2016): 1-20. *Business Source Complete*. Web. 19 Mar. 2016.
- Kumar, Ashish, et al. "From Social To Sale: The Effects Of Firm-Generated Content In Social Media On Customer Behavior." *Journal Of Marketing* 80.1 (2016): 7-25. *Business Source Complete*. Web. 27 Feb. 2016.

- Love, Robert. "The Smart Money Is on the 50+ Crowd." *AARP.org*. American Association of Retired Persons, June-July 2014. Web. 22 Feb. 2016.
- Pavlou, Paul A., and Mendel Fygenon. "Understanding And Prediction Electronic Commerce Adoption: An Extension Of The Theory Of Planned Behavior." *MIS Quarterly* 30.1 (2006): 115-143. *Business Source Complete*. Web. 25 Mar. 2016.
- Mander, Jason. *Generations: GWI Audience Report Summary Q2 2014*. Rep. GWI Web Index, 2014. Print
- McMullen, Tim. "Reasons To Market To Baby Boomers On Social." *Promotional Marketing* (2015): 1. *Business Source Complete*. Web. 27 Feb. 2016.
- Pick, T. (2013, August 9). 101 vital social media and digital marketing statistics. *Social Media Today*. Retrieved from [URL:http://socialmediatoday.com/node/1647801](http://socialmediatoday.com/node/1647801)
- Shafi, Syed Irfan, and C. Madhavaiah. "The Influence Of Brand Equity On Consumer Buying Behaviour Of Organic Foods In India." *Journal Of Marketing & Communication* 9.2 (2013): 44-51. *Business Source Complete*. Web. 19 Mar. 2016.
- Social Network Ad Spending to Hit \$23.68 Billion Worldwide in 2015 - EMarketer." *EMarketer*. EMarketer, 15 Apr. 2015. Web. 21 Feb. 2016. <<http://www.emarketer.com/Article/Social-Network-Ad-Spending-Hit-2368-Billion-Worldwide-2015/1012357>>.
- Stelzner, M. (2012, April). How marketers are using social media to grow their businesses. *Social Media Marketing Industry Report*. www.socialmediaexaminer.com/SocialMediaMarketingIndustryReport2012.pdf
- Stephen, Andrew T., and Jeff Galak. "The Complementary Roles Of Traditional And Social Media Publicity In Driving Marketing Performance." *INSEAD Working Papers Collection* 97 (2010): 1-40. *Business Source Complete*. Web. 13 Feb. 2016.
- Venter, Peet, Alex Wright, and Sally Dibb. "Performing Market Segmentation: A Performative Perspective." *Journal Of Marketing Management* 31.1/2 (2015): 62-83. *Business Source Complete*. Web. 21 Feb. 2016.
- Wallace, D. (2012). How Small Business can Benefit from Social Media/Networking Sites. *Agency Sales Magazine*, 42(8), 16-20.