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# The effect of brands' social network content quality and interactivity on purchase intention: Evidence from Jordan

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#### CHRONICLE

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#### ABSTRACT

Social media has become one of the most effective tools for marketing and promotion of brands. Given this importance of social media, it is therefore critical for brands to develop quality content for their brand pages and frequently interact with consumers. Using theoretical lens of Stimulus-Organism-Response (S–O-R) paradigm, this research aims to study the impact of content quality and brand interactivity on purchase intention via mediation of brand awareness. To this end, we collected data from n=282 millennial shoppers of sportswear to test hypothesized relationships. Our findings suggest that content quality and brand interactivity significantly impact purchase intention. It is further revealed that brand awareness mediates the relationship between content quality and purchase intention as well as brand interactivity and purchase intention. This research provides new theoretical insights into social media marketing and consumer behavior research by linking content quality and brand interactivity to purchase intention.

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#### 1. Introduction

In recent times, the advent of social media has changed the way firms and brands communicate and engage with their customers. Recently a surge increase in internet users has been seen around the globe and it is estimated that the number of internet users has reached to around two billion (Carlson et al., 2018), which suggests the importance of this quickly expanding communication channel as a prominent source of creating brand awareness (BA) and influencing consumers' purchase decisions (Godey et al., 2016). Due to this prominence of internet as communication channel, the role of social media platforms (i.e. YouTube, Instagram, Twitter, and Facebook) in spreading and sharing information has become central, hence firms are spending large amounts of money to establish a strong presence on these platforms (Foux, 2006). These social media platforms reinvented the way of creating, circulating, and consuming the brand content and provided consumers infinite opportunities to access and use brand information to make purchase decisions (Men & Tsai, 2013). Both managers and researchers are devoting efforts to study the behavior of millennials towards social media as millennials are the most frequent social media users. The members of millennial generation are known as digital natives, who are the first generation born during internet era and exposed to the digital environment for their entire lives (Prensky, 2001). Another reason behind growing interest to study the behavior of millennials is the fact that their behavior is an indication of how people will act in coming times (Bolton et al., 2013). Academic research suggests that social media has become the most effective tool for marketing and promotion of brands (Beukeboom et al., 2015). Due to quick and easy access, brand websites and social media pages have become the most important medium to seek and find information related with brand (Beukeboom et al., 2015). Given this importance of social media and brand websites, it is therefore critical for brands to develop quality content for their websites and brand pages. High quality content enables potential consumers to develop a better understanding of brand offerings, get support and

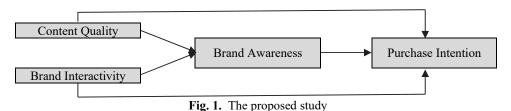
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make better purchase decisions (Barreda et al., 2015). Social media pages of brands serve as communication between consumers and brands (Beukeboom et al., 2015). This communication between brand and consumer is regarded as brand interactivity (BI) (Carlson et al., 2018), which includes the features like providing brand information, special offers and discounts, special features, store locations, and virtual tours (Ghose & Dou, 1998). It is further argued by Chung and Zhao (2004), that this interactivity differentiates social media from traditional media (i.e. print and electronic media). A number of studies have revealed positive impact of interactivity on consumer behavior (Kim & Ko, 2012; Naylor et al., 2012). This assertion shows the importance of interactivity in marketing literature (Kim & McMillan, 2008), therefore it is critical to understand how BI influences consumer behavior (Beukeboom et al., 2015). Despite the fact that content quality (CQ) and BI result in positive consumer behavior outcomes, a negligible effort has been made to study the interplay between CQ, BI, and consumers' purchase intention (PI). Therefore, the first objective of this study is to study the link between CQ, BI, and consumers' PI.

It is evident from research that high quality information helps users get information related to a product or service (Zheng et al., 2012). Brands offer updated, reliable and credible information on their social media pages to consumers have a competitive advantage over their competitors (Jang et al., 2008). In this way, brands that provide quality information are regarded as more attractive (Gorla et al., 2010). Over the time, the quality of information affects individuals' level of BA and allow them to recognize and recall the brand (Biedenbach & Marell, 2010; Smith & Swinyard, 1982). Once, consumers become aware of brand related information, it is more likely that their PI will increase. PI is an element of consumer's cognitive behavior that suggests the way he/she is expected to purchase a particular brand or product (Su & Huang, 2011). However, prior research has rarely considered BA as outcome variable of content quality, and BI. In addition to this, few studies have studied the link between BA and PI. In summary, there is a lack of research that explores how content quality, and BI stimulates BA that eventually contributes to enhance consumers' intention to purchase brand. The prime contribution of this study is to facilitate a better understanding of how content quality, and BI contributes to consumers' PI through mediation of BA.

The purpose of this study is to study the link between content quality, and BI and PI via BA. The objectives of this research endeavor are sevenfold: (1) to investigate the relationship between CQ and PI; (2) to investigate the link between BI and PI; (3) to study the relation between CQ and BA; (4) to explore the relation between BI and BA; (5) to explore the relationship between BA and PI; (6) to investigate the mediation effects of BA between CQ and PI; (7) to examine the mediation effects of BA between BI and PI. Fig. 1 depicts theoretical model of current study.



## 2. Literature review and hypotheses development

#### 2.1 S-O-R model

In today's world, the social media has become an integrated part of consumers' lives and have great influence on their behavior. Stimulus-Organism-Response (S—O-R) paradigm provides theoretical foundations to understand how consumers react to social media environment. S-O-R model suggests that environmental stimuli generates a cognitive or emotional reaction, which in turn drives consumer's behavioral response (Mehrabian & Russell, 1974). In 1970s, this model was initially adopted to study consumer behavior, since then, various studies used this model to explore the technological environment cues (Zhang et al., 2014). Recently, study conducted by Hu et al. (2016) in context of online shopping environment used S-O-R model to study the link between website features and consumers' PI. They referred peers' qualities and website features as "stimulus", experimental shopping values as "organism", and "response" is considered as users' PI. Likewise, Fang et al. (2017) used S-O-R model in context of mobile applications and reported that performance and design attributes of various mobile applications affect benefit perception and psychological engagement, which in turn impacts behavioral intentions (Carlson et al., 2018).

#### 2.2 Content quality and purchase intention

In academic research, CQ is defined as individual's perception regarding completeness, accuracy, timeliness and relevance of information related with brand on social media page of the brand (Carlson et al., 2018). Academic research suggests that high quality information on social media allow users to get a better understanding about brand offerings, get support from other users and become able to make better decisions (Watts & Zhang, 2008). High quality information helps users to get information related with a particular product or service, and receive suggestion on a specific subject (Barreda et al., 2015). According to Jang et al. (2012), social media offers updated, reliable, rich, credible and quick information to consumers. Research also suggests that the quality of information presented on website significantly affects brand perception as reliable (Martins

et al., 2019) which eventually increase intention to purchase brand. Consumers get relevant information about brand offerings and if their needs match with required information, it is likely they will purchase the brand (Martins et al., 2019).

H<sub>1</sub>: CQ is positively associated with PI.

## 2.3 Brand interactivity and purchase intention

A number of studies have suggested the importance of BI in shaping consumer PI (Pavlou & Stewart, 2000). For instance, Cho and Leckenby (1991) reported that as brand's interactivity with consumer increases, it is likely that more favorable intentions to purchase the brand will be developed. Similarly, Nelson (2005) reported that consumers' interactivity with brand offerings increases their intentions to purchase the products offered brand. Schlosser (2003) showed that objective interactivity (consumer's product simulation experience) increases vivid mental images, that eventually results in consumer's PI. Experimental study conducted by Lee et al. (2014) in context of advergames suggests that consumers showed strong PIs while playing advergames with BI as compared with without BI. Likewise, Beukeboom et al. (2015) reported that consumers following updates on brand's Facebook page showed strong intentions to purchase brand. Wu and Chang (2005) studied the impact of interactivity on PI in context of e-commerce, and reported that interactivity positively influences PI. In light of above cited literature, we propose following hypothesis:

H<sub>2</sub>: BI is positively associated with PI.

## 2.4 Content quality and brand awareness

It is evident from literature that attractive and innovative content enhances consumers' brand engagement and significantly contributes in capturing consumers' brand attention (Berger & Milkman, 2012). In addition, a considerable amount of research has suggested that CQ works as an environmental cue that is necessary to shape online customer behavior (Nambisan & Baron, 2009). Research conducted by Barreda et al. (2015) in context of tourism industry suggests that the CQ of material published by firms on their social media pages affects individuals' level of BA and allow them to recognize and recall the brand. The cited literature suggests an association between the CQ and consumers' BA, hence we propose following hypothesis:

H<sub>3</sub>: CQ significantly contributes to BA.

#### 2.5 Brand interactivity and brand awareness

BI can be postulated as providing assistance to customers on social media and space to exchange ideas and discussions (Gallaugher & Ransbotham, 2010). In line with above definition of BI, it can be said that the interaction between consumers and brand on social media is changing the communication between brands and customers (Carlson et al, 2018). In recent times, the social media has become a prominent source of communication between customers and brands, this importance of social media as a mode of communication between customers and brands has forced brands to be innovative, dynamic, helpful, and open in discussions to increase interaction (Godey et al., 2016). According to Murdough (2009), this enhanced interaction between customers and brands has also increased customer engagement. Murdough (2009) further suggested that promoting ongoing interaction between customers and brand can further strengthen the relationship between consumer and brand and help marketers to uncover the general themes in feedback provided by customers, and convince consumers to engage with online content. Summarily, brand interaction can be regarded as a critical component in social media environment. Thus, we propose following hypothesis:

H<sub>4</sub>: BI positively influences consumer's BA.

## 2.6 Brand awareness and purchase intention

According to Aaker (1996), BA reflects consumer's ability to recall and recognize a particular brand in different situations. This conceptualization of BA suggests that BA comprised of brand recognition, that is customers' capability to identify a brand through a brand cue, and brand recall, that is customers' ability to recall a brand name (Dabbous & Barakat, 2020). Academic research regarded BA as a primary and most prominent limitation in any brand related search, that directly influence consumer's purchase decision (Kapferer, 2008). Study conducted by Evans (2008) suggests that by utilizing social media, firms can promote and create awareness of their brands, and then can transform this awareness into consumer PI. Consumer PI is an element of consumer's cognitive behavior that suggests the way he/she is expected to purchase a particular brand or product (Huang & Su, 2011). Therefore, the following hypothesis can be posited:

H5: BA positively influences on consumer PI.

#### 2.7 Mediating role of brand awareness

Academic research has suggested that quality of content available on social media and brand website significantly influences consumer behavior and attitudes (Carlson et al., 2018). This positive effect of CQ on consumer behavior is empirically supported by Jahn and Kunz (2012) and Zhang et al. (2015) in context of social media. On social media, consumers interact with

brands while searching for information related with benefits, brand attributes and associations that may impact consumers' experience towards brand (Ho & Wang, 2015). In this way, consumer's experience of getting effective and useful brand information on social media page of brand may transform into intention to purchase brand. In light of above discussion, we believe that the quality of content on brand's social media page will enhance consumer's BA and eventually results in brand PI. Therefore, we posit following hypothesis:

H<sub>6</sub>: BA mediates the relationship between CQ and PI.

Brands establish an active presence on social media by engaging in activities like offering product information, customer service, and special offers (Barnes et al., 2013). Research conducted by Beukeboom et al. (2015) suggests that through updates posted by brands on their Facebook pages, the consumers become aware of brand offerings, in this way, their intention to purchase brand increases. These activities help brands to advertise and promote their products and to develop strong relationships with prospective customers (Martins et al., 2019). Due to this interactivity of brands, consumers become aware of products being offered by brands, latest promotions and offers, finally this awareness results in brand PI (Evans, 2008).

Consistent with above discussion, we believe that enhancing communication with potential consumers on brand's social media page will aware consumers about the brand offerings which will enhance their intention to purchase the brand. Hence, we propose following hypothesis:

H<sub>7</sub>: BA mediates the relationship between BI and PI.

## 3. Methodology

#### 3.1 Sample and data collection

To conduct this research, a survey questionnaire comprised of 14 scale items was developed. The scale items were adapted from previous research, and were measured on a five point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. The participation in survey was restricted to individuals having account on social media platforms (i.e. Facebook, Instagram, and Twitter) and like to wear sportswear. In questionnaire, two filter questions were also included to screen participants. The screening questions were: "Do you have a social media account on which you were active during last three months?", and "Name your favorite sportswear brand". Participants were asked to mention the name of their favorite sportswear brand (i.e. Adidas, Puma, and Nike) and answer the series of questions. The participants voluntarily participated in the survey and no remuneration or any reward was offered against the participation. The survey was conducted at three metropolitan cities of Jordan (i.e. Amman, Zarqa, and Irbid) during the months of October, November, and December 2019. Participants were approached outside the shopping malls and supermarkets. Initially, 350 surveys were distributed and 323 were retuned, 41 surveys were removed due to incomplete data. The final usable sample comprised of n = 282 responses.

## 3.2 Measures

#### Content quality

The CQ was measured by using 3 scale items used by Carlson et al. (2018). The sample scale items were: "Content shown on the social media pages of the brand I follow is accurate Carlson"; "Content shown on the social media pages of the brand I follow is interesting".

## Brand interactivity

The BI was measured through 3 scale items used by Dabbous and Barakat (2020). The sample scale items were: "The social media pages of the brand I follow allows me to communicate easily with the company"; "The social media pages of the brand I follow allows me to deliver my opinion easily to the company".

#### Brand awareness

The BA was measured by using 4 scale items used by Tong and Hawley (2009) and Dabbous and Barakat (2020). The sample scale items were: "I can quickly recognize brands I have seen on social media among other competing brands"; "I am more familiar with brands I have seen on social media than brands I have seen in other contexts (stores, advertisements)".

## Purchase intention

PI was measured by adopting 4 items from Dabbous and Barakat (2020). The sample scale items were: "Seeing brands on social media pages increases my interest in buying them"; "I intend to buy brands I have seen on social media pages".

## 3.3 Data analysis

To analyze the collected data and test hypothesized relationships, structural equation modeling (SEM) technique was adopted. To this end, IBM SPSS 23.0 and Smart PLS 3.2.9 statistical packages were used. SPSS 23.0 was used to for data screening, whereas Smart PLS 3.2.9 was used to assess reliability and validity of measurement model, and to assess the structural model.

The mediation of BA was examined by following procedure suggested Preacher and Hayes (2008) where indirect effects will be assessed through bootstrapping by taking 5000 subsamples.

#### 4. The results

Following the recommendations suggested in PLS-SEM literature, we used a two-step approach where; first, the measurement model was assessed and then structural model was examined for hypothesis testing and predictive capability assessment (Henseler et al., 2009; Siyal et al., 2019).

#### Measurement model

First, inter-item reliability was ascertained through evaluation of factors loadings and a suggested threshold of 0.70 was maintained (Hair et al., 2016). After achieving inter-item reliability, we proceed with examination of convergent validity by assessing average variance extracted (AVE) values of latent variable by ensuring that all values met the suggested threshold of 0.50 (Chin, 1998; Gefen et al., 2000). Similarly, after establishing convergent validity, composite reliability was measured to ascertain internal consistency reliability and as literature suggested a threshold of 0.70 was maintained (Hair et al., 2016; Gefen et al., 2000). Results in Table 1 show that suggested threshold is successfully achieved.

Table 1
Measurement model

Construct	Items	Loadings	Alpha	CR	AVE
Brand Awareness	BA1	0.965		0.983	0.936
	BA2	0.968	0.077		
Brand Awareness	BA3	0.967	0.977 0.799 0.825		
	BA4	0.969			
	BI1	0.903		•	0.711
Brand Integration	BI2	0.778	0.799	0.88	
	BI3 0.844				
	CQ1	0.904		0.889	0.728
Content Quality	CQ2	0.768	0.825		
•	CQ3	0.882			
	PI1	0.851			
Purchase Intention	PI2	0.823	0.828	0.897	0.744
	PI3	0.912			

## Discriminant validity

The discriminant validity was assessed through the method of Heterotrait-Monotrait ratio of correlations (HTMT). HTMT method determines discriminant validity based on Multitrait-Multimethod matrix (Henseler et al., 2015). Literature suggests that problem of discriminant validity occurs if HTMT score exceeds 0.85 (Kline, 2011), or 0.90 (Gold et al., 2001). Results presented in Table 2 suggest that all values met the suggested criteria, hence discriminant validity has been ascertained.

**Table 2**Discriminant Validity

Construct	1	2	3	4
Brand Awareness				
Brand Interactivity	0.658			
Content Quality	0.515	0.772		
Purchase Intention	0.602	0.873	0.791	

# Structural model

As per guidelines of Henseler et al. (2009), in second step, we assessed the significance of path coefficients. The bootstrapping technique by taking 5000 subsamples was performed (Hair et al., 2016) by using Smart PLS 3.2.9 software. Results presented in Table 3 shows empirical support for all hypothesized relationships.

**Table 3**Structural model

Hypothesis	Relationships	Beta	SD	t-Value	p-Value	Decision
1	$CQ \rightarrow PI$	0.307	0.061	5.042	0.000	Supported
2	$BI \rightarrow PI$	0.469	0.056	8.378	0.000	Supported
3	$CQ \rightarrow BA$	0.191	0.055	3.437	0.001	Supported
4	$BI \rightarrow BA$	0.474	0.061	7.746	0.000	Supported
5	$BA \rightarrow PI$	0.547	0.041	13.431	0.000	Supported
6	$CQ \rightarrow BA \rightarrow PI$	0.104	0.031	3.379	0.001	Supported
7	$CQ \rightarrow BA \rightarrow PI$	0.104	0.031	3.379	0.001	Supported

Note: CQ = Content quality, PI = Purchase intention, BI = Brand interactivity, BA = Brand attachment.

#### Predictive power of model

The predictive power of the model was determined through  $R^2$ . We computed  $R^2$  by running PLS algorithm in Smart PLS and found  $R^2$  value of 0.379 for BA and 0.297 for PI. Literature suggests that in social science research, the  $R^2$  values greater than 0.10 are acceptable (Falk & Miller, 1992), since our  $R^2$  results met the suggested threshold of 0.10, therefore predictive power of the model has been established. (Detailed results are presented in Table 4).

**Table 4** Predictive relevance

Construct	R Square	$Q^2$
Brand Awareness	0.379	0.33
Purchase Intention	0.297	0.208

Finally, relevance of the dependent variables was assessed by examining  $Q^2$  as suggested by Fornell (1994). The assessment of  $Q^2$  was performed by employing blindfolding procedure through examination of cross-validated redundancy. Research suggests that predictive relevance of the model establishes when obtained value for  $Q^2$  exceeds zero. The results presented in Table 4 suggest all  $Q^2$  values are greater than zero, hence the predictive relevance e of the model is established.

#### 5. Discussion

This research is one of the initial attempts to explore the impact of CQ and BI on PI via BA by highlighting CQ and BI as new avenue to enhance consumers' PI. Specifically, current study contributes to extension of previous research on social media marketing and brand management by examining the effect of CQ and BI under the theoretical framework of S-O-R model in sportswear setting. Second, this research is contributing to social media marketing and brand management literature by investigating whether the impact of CQ and BI on PI is mediated by BA. As we expected, the findings suggest that CQ significantly contributes to PI. This can be related with the fact that consumers' PIs can be enhanced by improving the quality of content being uploaded on social media pages and website of the brand. These findings are in line with previous studies (Martins et al., 2019; Carlson et al., 2018) which suggested that that the quality of content presented on website significantly affects brand perception as reliable and enhance consumers' intention to purchase the brand. Likewise, our results revealed that BI positively impacts consumers' intention to purchase the brand. It can be attributed to the fact that by interacting with consumers brands can increase consumers' PI. These results are consistent with previous research (Beukeboom et al., 2015; Wu & Chang, 2005) suggested that BI enables users to get latest and credible information regarding brand offerings, that eventually results in PI. As we hypothesized, our data supported the significant effect of CQ on BA suggesting that quality of content is positively with BA, higher the quality of content being uploaded on social media page of the brand, the higher will be the awareness of brand among social media users. These findings of current study are in line with Barreda et al. (2015) who reported significant impact of CQ in creating BA. Similarly, statistically significant results were found for positive impact of BI on BA, signifying that BI is positively associated with BA. It has shown that high level of BI foster BA. This can be attributed to the fact that frequent interactivity with potential consumers of the brand on social media will result in enhancing awareness of brand among social media consumers. This finding is consistent with findings of Murdough (2009), who reported significant impact of BI on BA. Likewise, empirical support was found for the impact of BA on PI, which suggested that BA shapes consumers' PI. The more is consumer aware about the brand, the more likely he/she is to purchase the brand. This finding is in line with findings of Evans (2008), who reported that by utilizing social media, firms can promote and create awareness of their brands, and then can transform this awareness into consumer PI. In addition to this, current study has explored the mediation effect of BA in relationship between CQ and PI, suggesting that the relationship between CQ and PI is mediated by BA. This can be attributed to the fact that quality of the content brands place on their social media pages enhance consumers' awareness about the brand which eventually convert into consumer PI. This finding is consistent with previous research (Ho & Wang, 2015), suggested the indirect effects of CQ on brand PI via BA. Similarly, our research detected the mediation effects of BA in relationship between BI and PI, demonstrating that BA mediates the relationship between BI and PI. This can be explained by the fact that the interaction between brand and social media users enhance users' awareness about the brand offerings, which eventually translates into PI. This finding is in line with the findings of (Evans, 2008), who reported the indirect effects of BI on brand PI through BA.

## 7. Research implications

The findings of this research have a number of theoretical and practical implications. Our study has contributed to the thin literature of social media marketing by highlighting the importance of social media in shaping consumers' intention to purchase the brands. Specifically, we have tested the mediation model by investigating the mediation effects of BA in relationship between CQ and PI, BI and PI, which may support practitioners and academicians in better understanding the importance of BI and CQ in shaping consumers' PI in todays' digital age. First, current study links CQ and BI with consumer PI under the theoretical framework of S-O-R paradigm. Our findings have revealed that CQ and BI significantly enhance consumers' intention to purchase brand when consumers become aware of brand. Hence, our research contributes to extension of S-O-R paradigm by suggesting that PI can be enhanced through improving the quality of online content and BI. Second, present research has introduced a contemporary way to enhance consumers' PI. Our findings suggest that BA plays a critical role in

explaining the effect of CQ on PI, it allows marketers to reconsider and rethink the importance of CQ in order to shape social media consumers' intention to purchase. This finding suggests that in order to shape PI, marketers need to develop quality content for their social media pages, which helps to aware individuals about brand offerings and develop their intention to purchase brand and eventually transform their intention into actual purchase. Third, this study suggested BA significantly explain the role played by BI in shaping PI and allow brand managers to design effective mechanisms to effectively interact with consumers to develop their intentions to purchase brand. It suggests that BI is critical in creating BA which eventually results in PI and finally in actual purchase.

#### 8. Limitations and future research

Despite the fact that current research contributes to growing body of research on social media marketing by making important theoretical and practical implications, there are limitations which can be served as avenues for future research. First, this research aimed to study the effects of CQ and BI on consumer behavior across a national sample of Jordanian millennial consumers, therefore, the findings may not be applicable to other sociocultural contexts. Therefore, social media marketers residing in other cultures should consider the findings of current study carefully. Researchers are invited to replicate current study in other cultures to establish the generalizability of the findings of current study. Second, this study has tested the mediation model by linking CQ with PI and by linking BI with PI via the mediation of BA. The explanatory power of current research model can be e improved by introducing new mediators (i.e. brand passion, brand engagement, word of mouth) and moderators (i.e. gender, generational gaps, product design, motivation).

#### References

- Aaker, D. A. (1996). Measuring brand equity across products and markets. California management review, 38(3).
- Bagozzi, R. P., Yi, Y., & Phillips, L. W. (1991). Assessing construct validity in organizational research. *Administrative Science Quarterly*, 36(3), 421-458.
- Barnes, N. G., Lescault, A. M., & Wright, S. (2013). 2013 Fortune 500 are bullish on social media: Big companies get excited about Google+, Instagram, Foursquare and Pinterest.
- Barreda, A. A., Bilgihan, A., Nusair, K., & Okumus, F. (2015). Generating brand awareness in online social networks. *Computers in Human Behavior*, 50, 600-609.
- Beukeboom, C. J., Kerkhof, P., & de Vries, M. (2015). Does a virtual like cause actual liking? How following a brand's Facebook updates enhances brand evaluations and purchase intention. *Journal of Interactive Marketing*, 32, 26-36.
- Biedenbach, G., & Marell, A. (2010). The impact of customer experience on brand equity in a business-to-business services setting. *Journal of Brand Management*, 17(6), 446-458.
- Bolton, R. N., Parasuraman, A., Hoefnagels, A., ... & Solnet, D. (2013). Understanding Generation Y and their use of social media: a review and research agenda. *Journal of service management*.
- Carlson, J., Rahman, M., Voola, R., & De Vries, N. (2018). Customer engagement behaviours in social media: capturing innovation opportunities. *Journal of Services Marketing*.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern Methods for Business Research*, 295(2), 295-336.
- Cho, C. H., & Leckenby, J. D. (1999, March). Interactivity as a measure of advertising effectiveness: Antecedents and consequences of interactivity in web advertising. In *Proceedings Of The Conference-American Academy of Advertising* (pp. 162-179). American Academy of Advertising.
- Chung, H., & Zhao, X. (2004). Effects of perceived interactivity on web site preference and memory: Role of personal motivation. *Journal of Computer-Mediated Communication*, 10(1), JCMC1017.
- Evans, D. (2008). Social media marketing: An hour a day. Wiley Publishing, Indianapolis
- Falk, R. F., & Miller, N. B. (1992). A primer for soft modeling. University of Akron Press.
- Fang, J., Zhao, Z., Wen, C., & Wang, R. (2017). Design and performance attributes driving mobile travel application engagement. *International Journal of Information Management*, *37*(4), 269-283.
- Bagozzi, R. P. (Ed.). (1994). Advanced methods of marketing research. Blackwell Business.
- Foux, G. (2006). Consumer-generated media: Get your customers involved. Brand Strategy, 8(202), 38-39.
- Gallaugher, J., & Ransbotham, S. (2010). Social media and customer dialog management at Starbucks. MIS Quarterly Executive, 9(4).
- Gefen, D., Straub, D., & Boudreau, M. C. (2000). Structural equation modeling and regression: Guidelines for research practice. Communications of the Association for Information Systems, 4(1), 7.
- Ghose, S., & Dou, W. (1998). Interactive functions and their impacts on the appeal of Internet presence sites. *Journal of Advertising Research*, 38(2), 29-43.
- Godey, B., Manthiou, A., Pederzoli, D., Rokka, J., Aiello, G., Donvito, R., & Singh, R. (2016). Social media marketing efforts of luxury brands: Influence on brand equity and consumer behavior. *Journal of business research*, 69(12), 5833-5841.
- Gold, A. H., Malhotra, A., & Segars, A. H. (2001). Knowledge management: An organizational capabilities perspective. *Journal of Management Information Systems*, 18(1), 185-214.
- Gorla, N., Somers, T. M., & Wong, B. (2010). Organizational impact of system quality, information quality, and service quality. *The Journal of Strategic Information Systems*, 19(3), 207-228.

- Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2016). A primer on partial least squares structural equation modeling (PLS-SEM). Sage publications.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modeling in international marketing. In *New challenges to international marketing*. Emerald Group Publishing Limited.
- Hu, X., Huang, Q., Zhong, X., Davison, R. M., & Zhao, D. (2016). The influence of peer characteristics and technical features of a social shopping website on a consumer's purchase intention. *International Journal of Information Manage*ment, 36(6), 1218-1230.
- Jahn, B., & Kunz, W. (2012). How to transform consumers into fans of your brand. Journal of Service Management.
- Jang, H., Olfman, L., Ko, I., Koh, J., & Kim, K. (2008). The influence of on-line brand community characteristics on community commitment and brand loyalty. *International Journal of Electronic Commerce*, 12(3), 57-80.
- Kapferer, J. N. (2008). The new strategic brand management: Creating and sustaining brand equity long term. Kogan Page Publishers.
- Kim, A. J., & Ko, E. (2012). Do social media marketing activities enhance customer equity? An empirical study of luxury fashion brand. *Journal of Business research*, 65(10), 1480-1486.
- Kim, J., & McMillan, S. J. (2008). Evaluation of internet advertising research: A bibliometric analysis of citations from key sources. *Journal of Advertising*, 37(1), 99-112.
- Kline, Rb. (2011). Principles and Practice of Structural Equation Modeling. *New York, NY: Guilford Press.* [Google Scholar]. Lee, J., Park, H., & Wise, K. (2014). Brand interactivity and its effects on the outcomes of advergame play. *new media & society*, 16(8), 1268-1286.
- Martins, J., Costa, C., Oliveira, T., Gonçalves, R., & Branco, F. (2019). How smartphone advertising influences consumers' purchase intention. *Journal of Business Research*, 94, 378-387.
- Mehrabian, A., & Russell, J. A. (1974). An approach to environmental psychology Cambridge. MA: Massachusetts Institute of Technology.
- Men, L. R., & Tsai, W. H. S. (2013). Beyond liking or following: Understanding public engagement on social networking sites in China. *Public Relations Review*, 39(1), 13-22.
- Murdough, C. (2009). Social media measurement: It's not impossible. *Journal of Interactive Advertising*, 10(1), 94-99.
- Nambisan, S., & Baron, R. A. (2009). Virtual customer environments: testing a model of voluntary participation in value cocreation activities. *Journal of product innovation management*, 26(4), 388-406.
- Naylor, R. W., Lamberton, C. P., & West, P. M. (2012). Beyond the "like" button: The impact of mere virtual presence on brand evaluations and purchase intentions in social media settings. *Journal of Marketing*, 76(6), 105-120.
- Nelson, M. R. (2005). Exploring consumer response to "advergaming". Online consumer psychology: Understanding and influencing consumer behavior in the virtual world, 156-182.
- Pavlou, P. A., & Stewart, D. W. (2000). Measuring the effects and effectiveness of interactive advertising: A research agenda. *Journal of Interactive Advertising*, 1(1), 61-77.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior research methods*, 40(3), 879-891.
- Prensky, M. (2001). Digital natives, digital immigrants. From on the horizon. MCB University Press, 9(5), 1-6.
- Ringle, C. M., Wende, S., & Becker, J. M. (2015). SmartPLS 3. Boenningstedt: SmartPLS GmbH.
- Schlosser, A. E. (2003). Experiencing products in the virtual world: the role of goal and imagery in influencing attitudes versus purchase intentions. *Journal of Consumer Research*, 30(2), 184-198.
- Siyal, A. W., Donghong, D., Umrani, W. A., Siyal, S., & Bhand, S. (2019). Predicting mobile banking acceptance and loyalty in Chinese bank customers. *SAGE Open*, 9(2), 2158244019844084.
- Smith, R. E., & Swinyard, W. R. (1982). Information response models: An integrated approach. *Journal of Marketing*, 46(1), 81-93.
- Su, D., & Huang, X. (2011). Research on online shopping intention of undergraduate consumer in China-based on the theory of planned behavior. *International Business Research*, 4(1), 86.
- Tong, X., & Hawley, J. M. (2009). Measuring customer-based brand equity: Empirical evidence from the sportswear market in China. *Journal of Product & Brand Management*.
- Watts, S. A., & Zhang, W. (2008). Capitalizing on content: Information adoption in two online communities. *Journal of the Association for Information Systems*, 9(2), 3.
- Zheng, Y., Zhao, K., & Stylianou, A. (2013). The impacts of information quality and system quality on users' continuance intention in information-exchange virtual communities: An empirical investigation. *Decision Support Systems*, 56, 513-524.



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