ABSTRACT

This study investigates how the millennial users’ gender and usage motivation differences influence evaluation and usage of social media sites. This study develops and tests a conceptual model that captures the relationship among four social media usage factors, social media involvement, satisfaction, and usage intention. The moderating role of two user characteristics on the social media usage behavior is also empirically tested. Structural equation analysis results show significant moderating effects of gender and the hedonic usage motive of the millennial users on the evaluation and usage behavior of social media sites. Managerial implications and future research directions are discussed.

KEYWORDS: Gender, Usage Behavior, Social Media Usage, Usage Motive, Involvement

INTRODUCTION

The use of social networking sites has grown dramatically as individuals use them as an interactive platform for communication and a source of information (Bodendorf & Kaiser, 2009) and as firms are adopting social networking sites as a key component in their evolving marketing strategy. These social networking sites permit users to share their experiences, information, opinions, preference, and product reviews (Hanna, Rohm, & Crittenden, 2011; Trusov, Bucklin, & Pauwels, 2009; Inks, Schetzle, & Avila, 2012; Kaplan, 2012). Firms’ marketing strategies are designed to use social media tools to encourage customers to repeatedly visit their social media sites and to become active participants and loyal customers of the firms and their brands.

Previous studies have demonstrated that millennial users have adopted social media tools and that millennial users differ from other user groups regarding both their use of social media sites (Bolton, et al, 2013; Dunne, Lawlor, & Rowley, 2010; Kilian, Hennigs, & Langner, 2012) and their use of interactive media (Moore, 2012). However, it is not well understood how millennial users evaluate and use the various types of social media. In developing a targeted social media marketing strategy, it is important for the firm to understand user differences, such as gender.
and usage motivation. Specifically, this study develops a conceptual model that captures the moderating role of two user characteristics on the social media usage behavior.

CONCEPTUAL MODEL

This study develops a conceptual model of social media user behavior that captures the relationships among four social media usage factors, social media involvement, satisfaction and usage intentions. The model identifies two moderating variables on these relationships. The moderating variables are gender and hedonic usage motives of the social media users.

Information Factors

According to the information influence theory, the quality or content of the information influences the user’s perception of the firm’s social media sites and their intention to use those sites (Ryu & Han, 2009; Song & Zinkhan, 2008). Further, the intrinsic value of the social media site for the user is created from the process of obtaining and sharing quality information from these social media sites (Dholakia, Bagozzi, & Pearo, 2004). Thus, the firm’s social media sites are being transformed into an information portal capable of influencing user’s attitude, satisfaction, and behavioral intentions (Heinrichs et al, 2007). So, as Lascu and Clow (2008) mentioned, the important components of information in that portal must be accurate, complete, unbiased and perceived as valuable by the user. As a result, well designed social media sites are increasingly used by firms to communicate with users, provide information to users, obtain information and opinions from users, provide services, and enhance the customer relationship (Song & Zinkhan, 2008; Zahedi & Song, 2009). Information quality and security of the firm’s social media sites can influence the user’s evaluation as well as the user’s experience and these sites can become the important factors to establish the effective online sharing of information (Palvia, 2009).

Usefulness

The technology acceptance model (TAM 3) (Venkatesh & Bala, 2008) describes the direct effect of perceived usefulness on behavior intention leading to usage behavior. The social influence components for TAM 3 are especially relevant for social media applications and tools. Individually generated content and perception can affect the creation of additional content and the adoption and use of the social media tools. Therefore, the successes of these social media application and tools are dependent on the social influence processes of social compliance, identification, and internalization. These social influence processes posit that social pressure will influence the intention of the individual and suggests that the individual incorporates the virtual communities’ beliefs into their own beliefs (Jan & Contreras, 2011). The usage of these applications and tools leads to the social media satisfaction generated from experience and instrumental benefits of using them and the social media involvement of users as a part of social influence processes. The technology acceptance model enhances the relevance and usage intention of social media applications and tools (Venkatesh & Bala, 2008).

Ubiquitous Interaction

Ubiquitous interaction facilitates communication, offers the opportunity to comment and provide feedback, supports instant messaging, and facilitates conversations among users (Dutta & Roy, 20003; Lascu & Clow, 2008). Social media sites provide various methods for communicating to masses of people. To understand communication strategies, the media richness theory can be applied. The theory states that the richer the social media communication, the more uncertainty
is reduced (Kaplan & Haenlein, 2010). Since the goal of communication is the resolution of ambiguity and the reduction of uncertainty, individuals use richer media for equivocal tasks (Daft & Lengel, 1986). By expanding these ideas of communication, Hansen, Shneiderman and Smith (2011) introduced the pace of interaction that consists of communication synchrony and frequency in social media. The ubiquitous interactive communication among users facilitates group participation, interaction, collaboration, and involvement. Thus, it is believed that the ubiquitous interactive communication among users in the social media sites has an impact on their belief toward social media sites and group interaction (Kaplan & Haenlein, 2010; Lascu & Clow, 2008).

Social Media Involvement

According to Zaichkowsky (1985), involvement is an individual’s perceived relevance of the ‘object’ based on their inherent needs, values, and interests. The ‘object’ can refer to many things such as a product or brand, an advertisement, or a buying situation. In this study, social media related involvement is viewed as an individual’s perceived relevance of social media tools and applications based on their inherent needs, values, and interests. Social media involvement is important in the message processing of web advertising and in user-generated content (Brown, Broderick & Lee, 2007; Raman & Leckenby, 1998). Social media involvement is also related to electronic word-of-mouth communication. Previous studies described significant differences in the factors affecting online versus off-line word-of-mouth communication behavior (Brown et al, 2007; Hennig-Thurau, 2004; Kiecker & Cowles, 2002; Richard, 2005). Tikkanen et al. (2009) mentioned that users in the online virtual community are engaging in interactive and productive marketplace exchange where users are taking an active role in building relationships. Desai (2009) showed that user involvement is key to understanding social media usage.

Social Media Satisfaction

Consumer behavior literature provides evidence that user satisfaction is influenced by many different factors (Butcher, Sparks, & O’Callaghan, 2002; Gountas & Gountas, 2007; Hellier, Geursen, Carr, & Rickard, 2003; Zboja & Voorhees, 2006). The literature also suggests that user satisfaction has an effect on the performance of an organization (Bernhardt, Donthu, & Kennett, 2000) and that satisfaction is positively related to user intention (Butcher, Sparks, & O’Callaghan, 2002; Gountas & Gountas, 2007; Hellier, Geursen, Carr, & Rickard, 2003; See-To & Ho, 2014; Zboja & Voorhees, 2006). Thus, social media satisfaction can be considered as whether the user’s expectations are being met by the firm’s social media sites. By using confirmation / disconfirmation theory (Oliver, 1999), the firm can determine if satisfaction can be achieved when the individual’s expectations are met or confirmed (Bhattacherjee, 2001; Lee & Kwon, 2011; Liao, Chen & Yen, 2007). With each new interaction with the social media application or tool, the user’s perception is affected by new information obtained from community members. This information serves to determine the user’s level of satisfaction at any given moment (Casaló, Flavián, & Guinalíu, 2010).

Usage Intention

Usage intention can be viewed as the extent to which the user would like to revisit the social networking site (Lin & Lu, 2000; Lin, 2007). However, it must be remembered that most users who are early adopters of technologies are more likely to base their usage intentions on perceptions thus integrating their personal sense of image and opinions from their social
network, rather than merely following a fad or merely showing off among friends (Lu, Yao, & Yu, 2005). Thus, it is believed that usage intention is influenced by involvement and satisfaction with social media sites (Nysveen, Pedersen, & Thorbjørsens, 2005).

**Gender Moderating Effect**

Gender differences have been documented in the literature (Colley & Maltby, 2008). Previous research indicated that females are less satisfied than males with their online experience (Rodgers & Harris, 2003) as females tend to show greater risk aversion and less trust in the use of the internet (Sanchez-Franco, Ramos, & Velicia, 2009). Also, males tend to value their ability to post content online, whereas females value responsiveness of the social media site (Awad & Ragowsky, 2008; See-To & Ho, 2014). Thus, it can be argued that males and females use social media for different reasons. Females tend to use social media more to communicate with friends while males use social media more to voice opinions. Males also tend to be more prone to satisfying information attainment compared to females who tend to be more prone to satisfying social interaction needs (Noble, Griffith, & Adjei, 2006). Thus, it is expected that males would have greater satisfaction, loyalty, and usage for social media sites that offer information they could consume while females would have greater satisfaction, loyalty and usage for those sites offering social interaction opportunities. These findings suggest that gender differences should be expected for the usage of various social media sites that have diverse user interfaces and characteristics. Extrapolating these findings, the following hypotheses are presented.

**H1:** The effect of (a) information quality, (b) information security, (c) usefulness, and (d) ubiquitous interaction on social media involvement will be moderated by gender.

**H2:** The effect of (a) information quality, (b) information security, (c) usefulness, and (d) ubiquitous interaction on social media satisfaction will be moderated by gender.

**H3:** The effect of (a) social media involvement and (b) satisfaction on usage intention will be moderated by gender.

**Hedonic Usage Motive Moderating Effect**

Previous research found that hedonically motivated shoppers are more engaged in the process of browsing and social interaction with others. These users tend to get involved in word of mouth communication and social interaction and online conversations in online communities (Jones et al. 2006; Lin et al. 2014; Wolfinbarger & Gilly, 2001). As hedonic users are searching for emotions such as happiness and enjoyment during the social media usage, they will seek the enjoyment of the process rather than the utility of using social media (Leftheriotis & Giannakos 2014). Therefore, as hedonic users are seeking fulfillment of emotional and socio-psychological needs as well as pleasure, relaxation, and self determination from using social media (Premkumar et al. 2008; Xu et al. 2012), their evaluation, adoption, and usage process of social media will be significantly different from those seeking non-hedonic motives such as utilitarian motives. These discussions lead to the following hypotheses.

**H4:** The effect of (a) information quality, (b) information security, (c) usefulness, and (d) ubiquitous interaction on social media involvement will be moderated by hedonic usage motive.

**H5:** The effect of (a) information quality, (b) information security, (c) usefulness, and (d) ubiquitous interaction on social media satisfaction will be moderated by hedonic usage motive.

**H6:** The effect of (a) social media involvement and (b) satisfaction on usage intention will be moderated by hedonic usage motive.
METHODS

Subjects and Procedures

This study used a self-administered questionnaire method to obtain data for analysis. Out of the 280 questionnaires distributed, a total of 159 questionnaires completed by business school juniors and seniors of a Midwest university were obtained. Neither monetary nor non-monetary incentives were given to the participants. Respondents consist of 96 males (61.9%) and 63 females (38.1%).

Construct Measures

Information quality items were adopted from previous studies (McMillan & Hwang, 2002; Song & Zinkhan, 2008), and information security was adopted from Lim et al. (2005). Usefulness items were adapted from Davis (1986). Ubiquitous interaction was captured by using three items (facilitates two-way communication, gives the opportunity to talk back, and enables conversations) with a five-point rating scale. Ubiquitous interaction items are adopted from McMillan and Hwang (2002) and Song and Zinkhan (2008). Involvement items were adopted from Lim, et al. (2005), and social media satisfaction was adapted from Song and Zinkhan (2008). Social media usage intention was measured willingness of use and likelihood of using social media sites. These items were adopted from Kwon and Wen (2010). Hedonic motive of social media usage by capturing whether using social media site is fun, exciting, enjoyable, and pleasurable to them.

RESULTS

Confirmatory Factor Analysis

This study utilized confirmatory factor analysis to assess the measurement properties. Table 1 shows the confirmatory factor analysis results.

| Table 1: Means, Standard Deviations, and Confirmatory Factor Analysis Results |
|-----------------------------|-----|-----|------|-----|----------------|
| Factor                      | Number of Items | Mean | S.D. | CR  | AVE | Factor Loadings |
| Information Quality         | 4   | 3.20 | .72  | 0.78| 0.48| 0.54 – 0.80     |
| Information Security        | 4   | 2.61 | .90  | 0.94| 0.79| 0.76 – 0.97     |
| Usefulness                  | 2   | 4.05 | .71  | 0.65| 0.49| 0.56 – 0.81     |
| Ubiquitous Interaction      | 3   | 3.94 | .88  | 0.90| 0.76| 0.72 – 0.95     |
| Involvement                 | 4   | 3.16 | .77  | 0.82| 0.53| 0.61 – 0.78     |
| Satisfaction                | 3   | 3.59 | .77  | 0.81| 0.59| 0.72 – 0.80     |
| Usage Intention             | 3   | 4.40 | .74  | 0.80| 0.57| 0.68 – 0.81     |
| Hedonic Motivation          | 2   | 3.48 | .76  | 0.88| 0.73| 0.69 – 0.99     |

Fit Indices: $\chi^2$/d.f. = 435.08/247 d.f.; Comparative Fit Index (CFI) = 0.95; Non-Normed Fit Index (NFI) = 0.94; Root Mean Square Residuals (RMSR) = 0.070.

Note: All coefficients are significant at the .05 level. CR: Composite Reliability; AVE: Average Variance Extracted.
The fit indices showed a good fit of the model to the data ($\chi^2 = 435.08$, d.f. = 247, Comparative Fit Index (CFI) = 0.95, Non-Normed Fit Index (NFI) = 0.94, Root Mean Square Residual (RMSR) = 0.070). All the items loaded significantly on the expected constructs. The composite reliabilities (CR) for the constructs ranged from 0.78 to 0.94 with the factor loadings from 0.54 to 0.99 and the average variance extracted (AVE) ranged from 0.48 to 0.79. These results indicate convergent validity of the measures. Discriminant validity was tested using chi-square difference test for each pair of constructs. The chi-square difference tests provide evidence of discriminant validity. The average variance extracted (AVE) from each construct was higher than the corresponding shared variance for all possible pairs of constructs. Thus, all constructs used in the model show adequate reliability and validity.

Testing Hypotheses

Multi-group LISREL analysis was performed to evaluate the direct effects and moderator variable effect. Chi-square difference tests are utilized to test the moderating effect of the gender and hedonic usage motive on the relationships among four determining factors, social media involvement, social media satisfaction, and usage intention.

The gender moderating effect test results show that the chi-square difference test for the relationship between information quality and involvement is significant. This test result provides support for hypothesis 1a. The chi-square difference test for the relationship between information security and involvement is significant providing support for hypothesis 1b. The chi-square difference tests for the relationships between usefulness and involvement as well as ubiquitous interaction and involvement are not significant providing no support for hypothesis 1c and 1d. The chi-square difference test for the relationship between information quality and satisfaction is significant. This test result provides support for hypothesis 2a. The chi-square difference test for the relationship between information security and satisfaction is significant providing support for hypothesis 2b. The chi-square difference tests for the relationships between usefulness and satisfaction as well as ubiquitous interaction and satisfaction are not significant providing no support for hypothesis 2c and 2d. The chi-square difference test for the relationship between involvement and usage intention is significant providing support for hypothesis 3a. The chi-square difference test for the relationship between satisfaction and usage intention is significant. This test result provides support for hypothesis 3b.

The chi-square difference test results for the low and high hedonic usage motive groups show that the chi-square difference test for the relationship between information quality and involvement is significant for the low and high hedonic motive groups. This test result provides support for hypothesis 4a. The chi-square difference test for the relationship between information security and involvement is significant providing support for hypothesis 4b. The chi-square difference tests for the relationships between usefulness and involvement as well as ubiquitous interaction and involvement are not significant providing no support for hypothesis 4c and 4d. The chi-square difference tests for the relationships between information quality as well as information security and involvement are not significant providing no support for hypothesis 5a and 5b. The chi-square difference test for the relationship between usefulness and satisfaction is significant for the low and high hedonic motive groups. This test result provides support for hypothesis 5c. The chi-square difference test for the relationship between ubiquitous interaction and satisfaction is significant providing support for hypothesis 5d. The chi-square difference tests for the relationships between involvement as well as satisfaction and usage intention are not significant providing no support for hypothesis 6a and 6b.
DISCUSSION AND CONCLUSIONS

This study developed and tested a consumer social media usage model by examining the moderating effect of gender and hedonic usage motive on the relationships among the four evaluation dimensions, involvement, satisfaction, and usage intention of social media. The results show significant moderating effect of gender on the relationships between information quality and involvement as well as satisfaction. Females show significantly stronger relationships than males suggesting that females consider information quality as the most important factor in determining social media involvement and satisfaction. The gender moderating effect is also significant for the path from information quality and security to satisfaction. Interestingly, males show much stronger relationships between security and involvement than females. This study found that males show much stronger relationship between involvement and usage intention and much weaker relationship between satisfaction and usage intention than females. This suggests that males are more influenced by involvement while females are more influenced by satisfaction in determining their social media usage intention.

This study also found significant moderating effect of users’ hedonic motive. The path from information quality to involvement is much larger for the high hedonic motive users than the low hedonic motive users. On the other hand, the relationship between security and involvement is much stronger for the low hedonic motive users than for the high hedonic motive users. As expected, the path from usefulness to satisfaction is much larger for the low hedonic motive users than for the high hedonic motive users suggesting usefulness related to non-hedonic motives play much significant role in determining satisfaction for the low hedonic motive users. The path from ubiquitous interaction to satisfaction is much larger for the high hedonic motive users than for the low hedonic motive users suggesting the importance of fulfilling social interaction needs for the high hedonic users.

The findings of this study have an interesting implication for firms. As users’ involvement and satisfaction with social media sites are found to be critical for customer relationship management and online management, firms must continually evaluate and redesign their various social media sites considering gender and usage motives of their sites’ primary users. Firms should develop differential strategies of utilizing various social media sites considering the gender and the degree of hedonic motives of participants of their social media sites. In addition, the relationship between involvement as well as satisfaction and usage intention is moderated by gender. Therefore, firms should put a different emphasis in managing their social media sites depending on the gender of the primary participants of their social media sites. This study has several limitations. A potential limitation is that the millennial respondents do not represent a diverse enough audience. As the millennials are active users and embrace new media (Bolton et al, 2013; Moore, 2012), the generalizability of the results from this study is limited as to the nature of the sample. Future research should address these limitations by using diverse samples to validate this study’s findings. The research should test gender differences in social media evaluation and usage and validate the findings using respondents in different age groups, cultures, and countries. In addition, future research should utilize actual measures of social media usage activity and responses obtained from different types of social media sites of a specific firm.

REFERENCES

References available upon request.