The Impact of Electronic-Word-of Mouth on e-Loyalty and Consumers' e-Purchase Decision Making Process: A Social Media Perspective

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Abstract—The idea behind the concept of Electronic Word-of-Mouth (e-WOM) is important to the visibility of individuals and businesses on social media. Although the e-WOM is increasingly adopting in Vietnam, the association of e-WOM with social media among Vietnamese is an under-researched area.

Accordingly, drawing on Social Cognitive Theory, this study aims to identify the role of e-WOM in developing e-loyalty and thus e-purchase. This study develops a model consisting of e-WOM as an independent variable, e-loyalty, and e-purchase as dependent variables, and information credibility, information quality and information usefulness as mediating variables. Analyzing the data obtained from 120 online brand members, this study shows that e-WOM has a significant positive impact on e-loyalty and e-purchase. Furthermore, information credibility, information quality, and information usefulness strengthened the relationship between e-WOM and e-loyalty.

Index Terms—e-loyalty, e-purchase, e-WOM, social media.

I. INTRODUCTION

In recent years, social media have become a hybrid component of integrated marketing communications (IMC) that allows the organization to establish a strong relationship with their consumers [1]. With the recent popularity of social networking sites (SNS), the online brand community has expanded its boundary to the virtually networked society [2]. SNSs include information- sharing sites (e.g. Facebook, MySpace, and Friendster), creativity works-sharing sites (e.g. YouTube and Flickr), collaborative websites (e.g. Wikipedia) and microblogging sites (e.g. Twitter) [3]. Such social networking sites enable the marketers and consumers to create online communities and promote the consumer-brand relationships with current and potential online community members [4], [5]. Consequently, the rapid emergence of the SNSs facilitates the marketers to encourage the online community members to voluntarily engage in various community behaviors such as membership intention, recommendation, and active participation [6], [7]. Given the collaborative and social characteristics of SNSs, this study focuses on SNSs as an online interactive platform for consumer-to-consumer (C2C) and business-to-consumer (B2C) conversations, namely brand-related word-of-mouth (WOM) in social media.

Word-of-mouth (WOM) has long drawn the attention of researchers and the practitioners due to its ability to reduce consumers' perceived risk in purchasing intangible [8] and high involvement offerings [9]. With the popularity of SNSs, WOM took an electronic form (e-WOM) [10]. The emergence of e-WOM has changed the way consumer interact with other consumers and business via SNSs [11]. Consumers actively exchange opinions, ideas and information about the brand, product or company among the online brand communities influencing the purchasing decision of the members in the online brand community [12].

It has been reinforced that businesses not only need to attract new consumers but also must retain them to ensure profitable repeat business [13]. Researchers, therefore, recognized that consumers' loyalty is a key path to acquire a higher profit for the businesses [14]. Without consumers' loyalty, even the best-designed models will soon fall apart. The consumers' involvement with social media has foster businesses to identify the antecedents of e-loyalty for online consumers [15]. In their quest to develop a loyal consumer, most businesses try to their best to continually develop a long-term relationship with them [16].

Most companies' SNSs attempt to encourage the consumers to produce more e-WOM because consumer-produced information provides potential consumers with the sense of credibility [17], quality and usefulness [18].

Researchers have recognized the growing importance of e-WOM in e-businesses [19], [20]. However, despite the growing importance of e-WOM, little empirical research has examined how consumers are actively engaging with e-WOM in a context of social networking sites. Given the significance of consumers' e-loyalty for the profitability and survival of e-business, little is known about e-loyalty with social media and the relationship between e-WOM and e-loyalty in the social media sphere. Moreover, few studies have recognized the effect of e-WOM on e-purchase behavior, even though it is an emerging topic in recent marketing literature. Although, the e-WOM is considered as a viable marketing strategy, the mediating effect of information credibility, information quality and information usefulness among e-WOM and e-loyalty has not yet been fully investigated.

Therefore, the current research addresses this research gaps and explores the relationship between e-WOM and e-loyalty in the context of social media, and consequently how these interactions relate to desired marketing outcomes. Since the exact relationship among e-WOM, e-loyalty, and e-purchase in social media has remained unclear, this study

reviews the existing literature on e-WOM while incorporating studies on branding to provide a comprehensive understanding of these constructs.

The business has recognized the benefits of information shared on social media by online community members. Since, the mediating effect of information credibility, information quality, and information usefulness has not fully investigated; this study identifies the brand community members' perception of these mediating variables and their possible relationship among e-WOM and e-loyalty. This study has developed based on social cognitive theory.

Based on Bandura's [21] social cognitive theory (SCT), this study attempts to explore whether and how consumers' motivations to engage in e-WOM influence the e-loyalty and e-purchase behavior of the brand followers in social media sites. Specifically, from the social cognitive perspective, this study expects that consumers' e-WOM behaviors for online brand communities will be a function of consumers' cognitive judgment on their capabilities to engage in activities for online brand communities (self-efficacy in social cognitive terms) and their assessment of the social benefits associated with their e-WOM behaviors (social outcome expectations) [22].

In terms of managerial contribution, the findings of this study provide marketers with a frame of reference to understand the influence of e-WOM in social media on consumers' e-purchase intention. This allows marketers to understand the dynamics of e-WOM, and thus to develop better marketing strategies. Findings of this study could help the marketers to identify the social influence of SNSs, develop their marketing strategies based on a social media perspective to distribute their information along e-WOM to their online brand community members, and foster the prospective consumers' perception towards the brands.

The aim of this study is to examine the effect of e-WOM on e-loyalty and e-purchase social networking sites. Based on the identified research aims, the following research question has developed.

RQ1: What is the extent to which e-WOM is related to e-loyalty and e-purchase behavior among the brand followers in social media?

There are two key objectives, which were formulated to address the research question.

(i) To evaluate the relationship among e-WOM, e-loyalty and e-purchase as perceived by brand community members.

(ii) To test the mediating effect of information credibility, information quality, and information usefulness among e-WOM and e-loyalty.

II. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

A. e-WOM

Today, the internet enables consumers to share their experience and opinions about products and brands. e-WOM was as "any positive or negative statement made by potential, actual, or former consumers about a product or company, which is made available to a multitude of people and institutions via the Internet" [23]. e-WOM, like marketers, provides explicit information, and tailored solutions to prospective purchasers [24], but, unlike marketers, it also offers interactivity and sympathetic ears to e-WOM participants [25]. Furthermore, e-WOM communication represents a shorter distance between the source of information and the receivers than marketers-induced communication [26].

With the gained popularity with e-WOM, exchanging product information or user experiences on the networked platform has become a new conduit of how e-WOM gets communicated among people [27]. Consumers are sharing their opinions on, and experiences with, brands with the members in online brand communities via different social network platforms [27].

The higher involvements with social media in generating more e-WOM about the brands could motivate the consumers to have an emotional long-term relationship with the brand and the business. This leads the consumers to become loyal to the brands and business, thus intended to purchase a particular brand on social media. From the preceding discussion, the following hypotheses are developed:

H1: The higher the level of e-WOM, the higher the level of e-loyalty

H2: The higher the level of e-WOM, the higher the level of e-purchase

B. E-Loyalty and e-Purchase

In the context of online and mobile service offerings, e-loyalty is regarded as a positive attitude and intentions towards the goods or services that result in purchase behavior. Accordingly, [28] defined e-loyalty as the consumers' favorable attitude towards an electronic business resulting in buying behavior.

Previous studies conceptualized loyalty as a behavioral response expressed over time, and gauge it through metrics such as the proportion of purchase, purchase sequence, and purchase frequency [29]. Keller (1993) suggested that loyalty is present when favorable attitudes for the brand are manifested in repeat buying behavior [30].

In an online environment, consumers' engagement with online brand communities creates social belongingness with the brand [30]. Although the underlying theoretical foundations of traditional loyalty and the newly defined phenomena of e-loyalty are generally similar, they have unique aspects related to Internet-based marketing and buyer behavior [31].

The consumers' e-loyalty towards a particular brand resulting in higher willingness to continue buying over the internet is e-purchase [32]. E-purchase extends the manual buying and selling process, from the creation and creation of the requisition through to payment of the suppliers [32]. The term e-purchasing encompasses back-office ordering systems, e-marketplaces and supplier websites [33]. Favorable attitudes encourage consumers to purchase via social networking sites [34]. From the preceding discussion, the following hypothesis is developed:

H3: The higher the level of e-loyalty, the higher the level of e-purchase.

III. MEDIATING ROLE OF INFORMATION CREDIBILITY, INFORMATION QUALITY, AND INFORMATION USEFULNESS

Information credibility is the extent to which one perceives a recommendation/comment/review as believable, true or factual [35]. In this study, the information credibility assesses the credibility of the information shared by the online community via social networking sites. The perception of the users' respect for the credibility of online news seems to be positive, in general. Consumers are willing to trust the information on shared on social media than other types of information sources [36].

When people find credible information on social media about the brands, they develop a favorable attitude towards the brands. Consumers perception on the information shared on the SNSs by the brand community members enhances the e-loyalty for a particular brand.

Information quality refers to the quality of output the information system produces [37], which can be seen as online screens or report. Operationally, information quality is information that is good, current, and accurate [38]. When consumers perceive the information that meets their needs and criteria, they are willing to evaluate each product or services based on their purchase decisions [39]. In a computer-mediated environment, a consumer's purchasing decision on the products and services can be determined by their perceived quality of information [40]. Information quality is an important building block and remains crucial to the success of the decision-making process in the online environment [41].

When the information doesn't conform to consumers' needs, the consumers will be dissatisfied [42]. Poor quality information leads to the distraction of users because it increases the user's search and information processing cost [43]. This could affect the consumers' favorability towards the brands and it influences the consumer's faith in the certain brand. Conversely, high-quality information will help users to have a better understanding of the brands, enhance the favorable attitude towards the brands, and make better decisions [44].

Information usefulness is a user perception concerning information reliability, existing comments or reviews on the internet which are valuable. Information usefulness is considered as the main predictors or purchase intention [45]. People engage with the information when they perceive the information as useful to them. Particularly in the social media environment, people encounter a greater amount of e-WOM information [46]. Information usefulness determines the extent to which the information readers adopt the information [47], [48] and make the final purchasing decisions [49], [50].

Useful information formulates consumers' perception towards preferred brands since the useful information could enhance the favorability towards the brands. When the brand preference increased, the purchase intention also increased.

From the preceding discussion, the following hypotheses are developed:

H4: Information credibility mediates the relationship between e-WOM and e-loyalty

H5: Information quality mediates the relationship between e-WOM and e-loyalty

H6: Information usefulness mediates the relationship between e-WOM and e-loyalty

Drawing from prior research, Social Cognitive Theory, this study designs a research framework to identify the possible relationship between e-WOM, e-loyalty, and other constructs. The conceptual framework in Fig. 1 has been adopted in this research to address the research questions identified above.
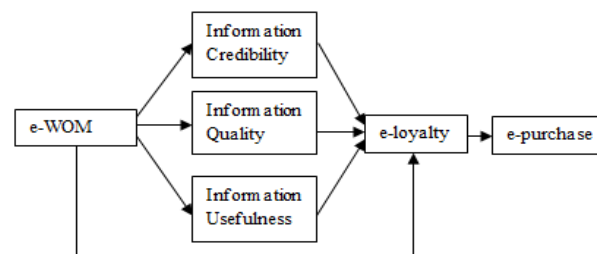

Fig. 1. Framework of the study.

IV. METHODOLOGY

In this study, the quantitative approach will be adopted and conform to the deductive approach. The present study is descriptive research, which is used to describe the topic of interest and finally, the causal relationship of the variables can be examined through hypothesis [51]. The research paradigm is based on positivism with the adoption of realist ontology that perceives reality to be objective and logical by observing causes or mechanisms driving effects in human behavior [52]. In addition, the positivist perspective focuses on the social pressures and situations operating on people to shape their attitude and behavior that reflects in this empirical study.

The survey method was used to collect data since surveys are considered to be the most popular form of data collection method in quantitative studies [52]. The data collection instrument was a structured, self-administered questionnaire. The questionnaire comprised of six sections which relate to e-WOM, e-loyalty, e-purchase, information credibility, information quality, and information usefulness. Each section was rated using 5 points Likert scale, where 1= strongly disagree, 2= disagree, 3= neutral, 4 = agree and 5=strongly agree. Data was collected from the sample of 120 undergraduates in Vietnam based on purposive sampling. Hence, this study has selected four private HEIs based on (a) research-intensive, (b) teaching-intensive, (c) regional-focused and (d) special interest [53]. This study has selected the undergraduates since the social media usages among young generation have grown rapidly from 12% in 2005 to 99% in 2017 [54], [55].

Data were analyzed using SPSS (version 25) to perform a number of appropriate statistical techniques depending on the research question. Before applying statistical tools, first, reliability and validity tests were performed. Correlation and regression tests were used to identify how strongly selected variables were related to each other or the degree of association between the two variables [56] and to predict the value of the dependent based on the known value of the independent variable, assuming that average mathematical relationship between two or more variables [57].

Exploratory and Confirmatory factor analyses were undertaken to reduce the bulk items into the manageable number avoiding scale items which were overlapping with other items in the same scale and to obtain the best fit. The present study mainly adopted Structural Equation Modeling (SEM) to obtain the best fit/confirmatory factor analysis using AMOS25.

V. FINDINGS

The significant findings of the research as obtained from the analysis have been shown in Table I. Cronbach's alpha was above 0.7, which indicates a satisfactory level of internal consistency [58]. All the items loaded (> 0.5) on their intended scales and average variance extracted (AVE) was above 0.5 [59].

TABLE I: CRONBACH'S ALPHA AND AVE RESULTS

	Cronbach Alpha	AVE
e-WOM	0.738	0.893
Information Credibility	0.769	0.649
Information Quality	0.727	0.753
Information Usefulness	0.783	0.616
e-loyalty	0.757	0.811
e-purchase	0.702	0.804

The correlation between e-WOM, e-loyalty, and e-purchase was tested according to the following hypothesis.

$H1_0$: No statistically significant correlation between e-WOM and e-loyalty.

$H2_0$: No statistically significant correlation between e-WOM and e-purchase.

$H3_0$: No statistically significant correlation between e-loyalty and e-purchase.

The sig-value for $H1_0$, $H2_0$, and $H3_0$ was observed at 0.000. Since, the p-value <0.05, the null hypotheses fails to be accepted. Therefore, we conclude, a statistically significant relationship exists between e-WOM-e-loyalty, e-WOM-e-purchase, and e-loyalty-e-purchase, with correlations of 0.628, 0.573, 0.736, respectively, indicating a moderate positive relationship among them. The R-Square and Adjusted R-square between e-WOM and e-loyalty were 0.381 and 0.38 respectively. 38% of the variance in the e-WOM was explained by e-loyalty.

Then, this study tested the relationship between e-WOM and e-loyalty after including mediating variables (information credibility, information quality, and information usefulness) according to the hypotheses mentioned below.

$H4_0$: Information credibility does not mediate the relationship between e-WOM and e-loyalty.

When the new predictor, information credibility, was included, the Adjusted R-square value changed to 0.568.56.8% of the variance in the e-WOM was explained by information credibility and e-loyalty. The Beta value (standardized) of the new predictor (information credibility) increased to 0.68 and it was significant (sig-value=0.000). Since, the p-value <0.05, fail to accept the null hypotheses, the information credibility could be considered as the

mediator between e-WOM and e-loyalty.

$H5_0$: Information quality does not mediate the relationship between e-WOM and e-loyalty.

With new predictor, information quality, the Adjusted R-square value was changed 0.571.57.1% of the variance in the e-WOM was explained by information quality and e-loyalty. The Beta value (standardized) of the new predictor (information quality) has increased to 0.62and it was significant (sig-value=0.000). Since, the p-value <0.05, fail to accept the null hypotheses, the information quality could consider as the mediator between e-WOM and e-loyalty.

$H6_0$: Information usefulness does not mediate the relationship between e-WOM and e-loyalty.

When the new predictor, information usefulness, was included, the Adjusted R-square value was changed to 0.560. 56.0% of the variance in the e-WOM was explained by information usefulness and e-loyalty. The Beta value (standardized) of the new predictor (information usefulness) has increased to 0.71 and it was significant (sig-value=0.000). Since, the p-value <0.05, fail to accept the null hypotheses, the information usefulness could be considered as the mediator between e-WOM and e-loyalty.

The mediating effect of information credibility, information quality, and information usefulness together between e-WOM and e-loyalty has changed the Adjusted R-square value into 0.562. 56.2% of the variance in the e-WOM was explained by information credibility, information quality and information usefulness, and e-loyalty. The relationship between e-WOM and e-loyalty was explained with a higher variance by including above mentioned mediating variables among e-WOM and e-loyalty.

A structural equation model was developed with AMOS25. The conceptual model was modified by creating covariance and deleting some items in order to obtain a good fit. Chi-square (χ^2) value and statistical significance levels have been calculated using the fit indices of confirmatory factor analysis [χ^2 = 495.29, df=309]. Depending on the degree of freedom, Normed Chi-square (χ^2) value [χ^2 /df= 1.602], showed that the data collected is appropriate to the scale items; whereas model's goodness of fit indices [RMSEA = 0.428, AGFI =0.901, GFI =0.947, CFI =1.000] showed that the model proposed for the scale is appropriate. Moreover, the examination of the values obtained for the model under standard compliance values validated the modeling of the factor structure.

VI. DISCUSSION

The primary purpose of this study was to test the relationship among e-WOM, e-loyalty and e-purchase behavior among the Facebook brand followers in Vietnam. In this process, the researcher has mainly focused on developing a conceptual framework including mediating variables which are information credibility, information quality and information usefulness between e-WOM and e-loyalty. The conceptual model was developed based on the critical review of previous literature and in consideration of

the main research question and research objectives. Furthermore, six hypotheses were developed to demonstrate the relationship between the main constructs of the research model.

Through the examination of the role of e-WOM using social cognitive theory, this study contributes to a deeper understanding of the Facebook brand followers' perception about the e-WOM and its impact on e-loyalty and e-purchase process.

The theoretical model and corresponding hypotheses were addressed the research objectives posed in this study. The outcome of the data analysis indicated that a relationship among e-WOM, e-loyalty, and e-purchase existed at a moderating level perceived by the Facebook brand followers. Furthermore, the variance among e-WOM and e-loyalty was able to explain with a higher percentage including information credibility, information quality and information usefulness as mediating variables. Moreover, introducing modifications, the theoretical model was developed with overall goodness-of-fit to an acceptable level.

The theoretical model and corresponding hypotheses were addressed the research objectives posed in this study. The correlation among e-WOM and e-loyalty, e-WOM and e-purchase behavior, and e-loyalty and e-purchase were 0.628, 0.573, and 0.736, respectively. The outcome of the data analysis indicated that a relationship between e-WOM, e-loyalty, and e-purchase existed at a moderating level perceived by the undergraduates. Furthermore, the findings were depicted that the variance among e-WOM and e-loyalty could explain with a higher percentage including information credibility, information quality and information usefulness as mediating variables. Information credibility, information quality, and information usefulness have changed the Adjusted R-Square values 0.568, 0.571, 0.560, respectively indicating a higher level of mediation among e-WOM and e-loyalty. Moreover, introducing mediators, the theoretical model was developed with overall goodness-of-fit to an acceptable level.

VII. LIMITATIONS AND DIRECTIONS FOR FUTURE RESEARCH

This study encounters some limitations. The first limitation concerns generalization because the sample is collected using the purposive sampling technique and is limited to undergraduates who are currently reading for their bachelor's degree. The second limitation of this study included the fact that only Vietnamese participated in the study. Third, the quality of data used in this study may be doubted since this study adopted only the quantitative approaches. In these regards, a future researcher has to classify clearly the consumption of social media, a method for future improvement would be to cooperate with these SNSs and send questionnaires directly to other social media users. Further investigation of other countries or other service sectors is recommended to enable further empirical testing of the methodology developed in this study, could also use different samples other than students to increase the generalizability of the findings, adopt both qualitative and quantitative approaches, and conduct and test this model in

more countries seeing as this study was only conducted in Vietnam.

VIII. THEORETICAL AND PRACTICAL IMPLICATIONS

This study raises some theoretical and practical implications. First, this study enhances the understanding of the antecedents of e-loyalty and its relationship with e-WOM in the context of social media. Second, the study contributes to the support of Social Cognitive Theory. The proposed theoretical framework identifies determinants of e-WOM in social media, information credibility, information quality, information usefulness, and e-loyalty and describes the manner in which each determinant affects the consumer's e-purchase process. Finally, the study contributes to a growing body of research on e-WOM, e-loyalty in the general services sector. Moreover, it is among the few empirical works to specifically examine the impact of e-WOM and e-loyalty in the social media sphere. The empirical insights it provides will add to the existing body of literature on the various factors affecting e-loyalty and long-lasting relationships with e-purchase behavior.

The study results provide valuable insights and practical implications for policy makers and marketing managers in who conducts marketing on social media. Business needs to connect with their students through excellent performance and a positive brand personality. A sustainable relationship is based on strong foundations built through unmediated personal, human-based connection, and not just on an advertising campaign. The essence of the e-WOM that as experienced by the Facebook brand followers for a long-term e-loyalty with online brands will improve the rational objective judgment which, in turn, enhances efficiency during decision-making processes.

IX. CONCLUSION

The analytical results indicated that e-WOM, e-loyalty, and e-purchase are positively correlated with each other in the Vietnamese online context. The results also found that information credibility, information quality, and information usefulness mediate the relationship between e-WOM and e-loyalty. In other words, a sense of information credibility, information quality, and information usefulness is played a key role in encouraging, persuading, and capturing Vietnamese internet users and online consumers in creating and increasing e-loyalty. The findings are useful especially for the online marketers or online service providers in Vietnam to encourage more Vietnamese to involve in an electronic-based community and assist the online consumer to make smart purchasing decision via the Internet. This analyzed model is still in its initial stage of development. Therefore, the future researchers can include future adaptions for this model in testing the relationship among e-WOM, e-loyalty, and e-purchase. Furthermore, Online shoppers with different levels of knowledge and experience may have different perceptions of e-WOM, e-loyalty, and e-purchase. Therefore, future research should evaluate the effect of the individual shopper characteristics such as e-

shopping experience and product/service knowledge on the proposed model. In addition, future research should validate the findings using e-shopping sites operating in different cultures and countries.

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