The Impact of Electronic Word of Mouth (EWOM) on Brand Image and Consumer Buying Decision: An Empirical Study of Cosmetic Products

Giang-Huong-Thi Vo, Binh-Duy Luong

Abstract— The study is aimed to examine the relationships among electronic Word of mouth (eWOM), brand image, and consumer buying decision in cosmetic industry. The questionnaire was distributed to 644 respondents who had experience with online communication. A structural equation modeling is applied to test the relationships among the research variables. The findings show that eWOM has a positive influence on brand image and consumer buying decision. In addition, the results also find the significant relationship between brand image and buying decision. This study suggests that marketers should focus on organizing the virtual communities besides developing the info-based company website.

Index Terms—Electronic Word of Mouth, Brand Image, Consumer Buying Decision, Vietnam

I. INTRODUCTION

Today communication and collaboration between consumers together or with brands are generally well served on a new platform due to the application of Web 2.0, the development of information technology and the popularity of the Internet. There is now around 50% of the population using Internet worldwide (Internet Live Stats, 2016). This number keeps rising every second and has grown rapidly in recent decades. Moreover, social networking has spread across globe with remarkable speed with around 68% of internet users contacting the online communities so far. Facebook is the most popular network leading with about 1.7 billions of active users (The Statistics Portal, 2016). And this trend established new ways of accessing for both consumers and marketers through a virtual community called eWOM (Almana & Mirza, 2013). It offers people the opportunities to approach, share and collect their thoughts and opinions (Hsu & Tran, 2013).

Moreover, Nguyen (2016) described cosmetic industry in terms of a huge potential for growth in Vietnam. The major sources of related information in this sector are friends (word-of-mouth) and sites. It is difficult to filter related information, evaluate the product performance and decrease purchase risks regarding to cosmetic products (Park & Lee, 2009). Therefore, social networks play an important role in Vietnamese consumers' buying behavior of cosmetics. According to Internet Live Stats (2016), there has been

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around 49 millions people, accounting for 52% of population using internet so far, and approximately 38 millions of them join actively social network (The Statistics Portal). It has shown that it is necessary for companies and marketers to have a deeper insight of Vietnamese consumer behavior, especially through virtual communities of purchasing cosmetics.

This study is mainly aimed to examine the impact of eWOM on consumer buying decision, also the role of brand image in shaping consumer decisions and the relationship between eWOM and brand image. Because the user engagement in eWOM communications is not identical across the nations, this study provides a clear empirical understanding of eWOM in Vietnam cosmetic industry context as well as helps companies develop the marketing campaigns to catch up the market trend.

II. LITERATURE REVIEW

A. Consumer Buying Decision

According to Blackwell et al., (2001), consumer behavior is regarding to the process that they select, own, consume and dispose products and services. Kotler (2008) defined buying decision as when consumers make up their mind whether to purchase products or not.

Consumers collect, evaluate, consider and experience various product attributes such as brand, price and quality, etc., before their final decisions are made (Schiffman & Kanuk, 2010; Khan et al., 2012). In addition, their decisions are also affected by some other factors like culture, social status, family, personal, and psychological (Schiffman & Kanuk, 2010; Hawkins et al., 2004 and Assael, 2004).

Besides, consumers often made their own choices based on the other experienced consumers rather than the opinions of the experts (Yayli, A., & Bayram, M., 2012). Then when consumers are satisfied with the product they bought, they are willing to share their experience with others (D'Souza et al., 2006).

B. Electronic Word of Mouth (eWOM)

As the technology advances, the format of WOM transfers from the face-to-face to eWOM, a form of word-of-mouth (WOM) communication. It is defined as the way that consumers exchange or discuss about the product or service information such as comments, attributes, recommendations by using online platforms (Hennig-Thurau et al., 2004; Sun et al., 2006). Various types of eWOM platforms consist of company official websites, online communities, blogs,

emails, product review websites, and other social networks (Bataineh, A., Q., 2015; Torlak, O. et al, 2014).

With the popularity of Internet and the advent and usability of Web 2.0, though eWOM is related to less personal communication than WOM, there is an increasing number of people manipulate webs as a tool to search for product information or write the reviews (Lee et al., 2008, Hennig-Thurau et al., 2004). Because the internet-based opinions are considered as reliable as the sources created by company on their official web and most of consumers read online reviews and evaluate online ratings before their actual buying decisions, the companies had better focus on managing their brand in virtual communities than simply placing an advertisement on Internet (Jalilvand & Samiei, 2012; and Rowley, 2001).

It is found that eWOM has not only significant and positive but also the strongest impact on consumer buying decision (Iduozee, 2015; Manafy, 2010 and Duan et al., 2008). Indeed, consumers tend to collect and choose the product information or give comments/ feedbacks before their act of buying (Hennig-Thurau & Wash, 2003). And they decide to buy depending on the statements given by the experienced consumers who had bought or consumed the brand of the company (Karakaya & Barnes, 2010). Moreover, because of the ability to approach widely, eWOM has a stronger effect than traditional WOM (Chatterjee, 2001). And it still keeps getting increasingly tremendous attentions today, especially in marketing (Teng et al., 2014). Besides, researchers point out that eWOM has a positive impact on not only consumer buying decision but also brand image regarding to the product and service (Jalilvand & Samiei, 2012; Charo et al., 2015). Nevertheless, there is no or only litte research reported on the strong effectivenenss of such eWOM or which type of eWOM having strong effects on brand image (Jalilvand & Samiei, 2012). The above study finds out the role and contribution of eWOM toward both enterprises and consumers by investigating its positive influence on consumer buying decision and brand image.

C. Brand Image

According to Keller (1993), brand image is defined as an intangible asset of the company concerning consumers' perception of the products that exists in their memory. It is an image that contains the information relevant to the product like charactersitics, attributes and reliablity, etc (Keegan et al., 1995). In other words, brand image also acts as the company's efforts to formulate and improve the existence of their images in consumers' minds (Wong & Merrilees, 1998). Therefore, in order to increase the competitive advantage, company needs to gain deeper insight into consumer behavior to build the proper marketing and branding strategies.

In the study of Nasar et al. (2012), they evaluated brand image in terms of the strongest factor for enhancing prestige of the brand. Especially in the increasingly competitive marketplace, the role of brand image is more and more important (Amstutz, 1970). Due to its reflection of the product quality, consumers are attracted to and appreciate the brand with positive image rather than the others (Grewal et al., 1998 and Shwu-Lng & Chen-Lien, 2009). Besides creating an image of the product in consumers' recognition, it helps

them discriminate between the product and competing brands (Arslan & Zaman, 2014).

Malik et al. (2013) and Fianto et al. (2014) showed that brand image has a strong positive and significant impact on consumer buying behavior. During the decision making process, consumers utilize brand image to approach and assess a product, minimize their perceived risks, and infer committed profits from buying and consuming the product compared with competitors' (He et al., 2013). In details, among numerous factors brand image still plays a key role as an extrinsic cue in purchasing decisions (Zhang, 2015). However, no positive relationship was found between brand image and buying decision in the study of Saeed et al., (2013). Thus researcher used the findings in this study to verify this relationship.

III. RESULS AND DISCUSSION

A. Results

Of a total sample of 644 respondents, 22.5 percent (145) were male and 77.5 percent (499) were female. A large majority of respondents' ages were in the ranges 25-30 (47.5 percent), 18-24 (25.6 percent) and 31-40 (17.5 percent). The majority of the respondents (40.2 percent) had a monthly income of more than \$251 - \$400. In addition, the majority of the respondents (65.5 percent) graduated bachelor degree. 77.3% of respondents used internet 21 hours or more in a week. The results also indicated that 39.9% of respondents said that they are fairly interested in cosmetics. Descriptive statistics are displayed in Table 1.

The model fit indices of the structural model and the cut-off value of those fit indices are presented in Tables 4. The goodness-of fit statistics show that the structural model fit the data reasonably well. The goodness of fit index (GFI = 0.944), comparative fit index (CFI = 0.964), the comparative fit index (NFI = 0.951), Tucker-Lewis index (TLI = 0.958) was higher than 0.90. Finally, the root mean square error of approximation (RMSEA = 0.63, with values < 0.08 indicating good fit), one of the indices best suited to our model with a large sample, indicated that the structural model was a reasonable fit.

Table 3 gives focus on the relationship among three variables which are eWOM, Brand Image and Consumer Buying Decision. One was found to be significant at the level of 0.05, and two relationships were significant at the level of 0.01. e-WOM had a significantly positive impact on brand image, with $\beta=0.392,\,p=0.000.$ It means that e-WOM was very important in building brand image. e-WOM also had a strong positive effect on consumer buying decision ($\beta=0.125,\,p=0.012$). The results suggest that e-WOM also plays a major role to consumer buying decision. Finally, brand image has positive impact on consumer buying decision, with $\beta=0.264,\,p=0.000,$ indicating that brand image was an antecedent of buying decision. As the research results indicated that all hypotheses were supported

- (1) e-WOM has a strong positive impact on brand image;
- (2) e-WOM has a positive impact on consumer buying decision; and
- (3) Brand image influences significantly consumer buying decision

B. Discussion

This paper aimed to present the influence of two factors eWOM and brand image on Vietnamese consumer buying decision and the relationship between eWOM and brand image in cosmetic industry. The empirical findings support the hypothesis regarding to effects of both eWOM and brand image on consumers' decisions. The study makes an effort to investigate and explain how the engagement in eWOM dominates the process of cosmetic products buying. According to results, eWOM has a significant positive impact on consumer buying decision. This is consistent with the previous study of Chevalier and Mayzlin (2006) that more and more consumers use eWOM to seek the preferences, evaluate, distinct and purchase the products. Besides, the analysis shows that brand image does influence consumer decision when they buy cosmetics products. And the results also validate the research conducted by Heidarian (2015). If consumers perceive the brand as a good image, it will strengthen their willingness to buy that cosmetics product. Moreover, the study implements another marketer's perspective that has just appeared in a few research – effect of eWOM on brand image. In the context of online communication, researcher examined the possible effect and it is found to corroborate the findings of Torlak et al. (2014) that eWOM has a positive impact on brand image. In conclusion, all of the hypotheses have been indicated in many previous studies by others; however there is still lacking the up-to-date experimental research in Vietnam, especially in cosmetic industry despite its development.

IV. CONCLUSION

In the 21st century, the development of social networking and information technology innovates consumers' ability to share their individual thoughts and opinions of products. Moreover, internet helps people access to global community effortlessly with almost costless. Thus eWOM plays an increasing role in consumer buying decision. And in the context of possible effects of eWOM, brand image is yet considered deeply and fully. Based on prior research, this study also enhances and contributes to the findings referring to eWOM, brand image and buying decision in cosmetic industry. The results showed that eWOM influence company's brand image positively. Besides, eWOM and brand image also have positive impacts on Vietnamese consumer buying decision. And these are important to the companies and marketers to gain a deep understanding of consumer behavior to develop their brands by organizing the virtual communities besides developing info-based official webs of the company.

This study has some limitations. There are many types of eWOM communication but all of them don't have the same effects and persuasiveness on consumer behavior. Like the other studies, the study does not examine the effects of related technology factors on consumer behavior. Future research should focus on both extrinsic cues and intrinsic cues affecting consumers regarding to ultilize eWOM communication.

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Table 1: Demographic characteristics (n=644)

Characteristics		Number	Frequency
Gender	Male	145	22.5
	Female	499	77.5
Age	18 - 24	165	25.6
	25 - 30	306	47.5
	31 - 40	113	17.5
	41-55	60	9.3
	\$100 - \$250	175	27.2
Monthly Income	\$251 - \$400	259	40.2
Monthly Income	\$401 - \$550	162	25.2
	Trên \$500	48	7.5
Education	High school	106	16.5
	Bachelor	422	65.5
	Master	77	12.0
	Others	39	6.1
Frequency of internet usage in a week	6-10 hours	14	2.0
	11-20 hours	76	10.6
	21 hours or more	554	77.3
Interest in cosmetics	Not intersted at all	19	3.0
	Fairly little interested	66	10.2
	Somewhat interested	195	30.3
	Fairly interested	257	39.9
	Very interested	107	16.6

Table 2Descriptive statistics of constructs

Constructs	Items	Loading	Mean	SD
Electronic Word of Mouth (EWOM) (CR = 0.903, AVE = 0.609)	EWOM1	.875	3.50	.981
	EWOM2	.862	3.66	.901
	EWOM3	.816	3.65	.943
	EWOM4	.804	3.78	.919
	EWOM5	.790	3.51	.995
	EWOM6	.770	3.85	.930
	BI1	.858	3.47	.888
	BI2	.858	3.36	1.049
Brand Image (BI) (CR = 0.907, AVE = 0,662)	BI3	.852	3.38	.946
(CR 0.507, 1141 0,002)	BI4	.850	3.37	.971
	BI5	.848	3.28	1.114
	BD1	.889	3.73	.974
Consumer Buying Decision (BD) (CR = 0.853, AVE = 0.660)	BD2	.882	3.90	.921
(211 0.002,11.2 0.000)	BD3	.863	4.06	.876

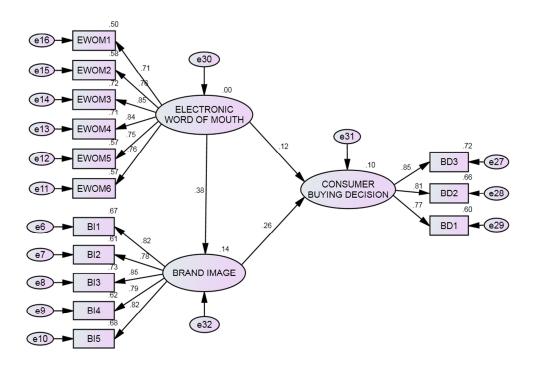


Figure 1. Standardized Regression Coefficients

Table 3Maximum likelihood estimates for research model (n = 664)

Independent variable	Dependant variable	Estimate	Standardized estimated	p-value
eWOM	Brand Image	0.392	0.378	**
eWOM	Consumer Buying Decision	0.125	0.118	0.012*
Brand Image	Consumer Buying Decision	0.264	0.259	**