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# INVESTIGATING FACTORS AFFECTING ELECTRONIC WORD-OF-MOUTH IN THE OPEN MARKET CONTEXT: A MIXED METHODS APPROACH

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## Abstract

*Electronic Word-of-Mouth (eWOM) has been identified as one of key factors affecting online sales. There has been, however, lack of understanding about the factors leading to eWOM in the open market context. As many Internet vendors have adopted the open market business, it is essential to understand the factors leading to eWOM for the success of open market business. This study investigates factors affecting eWOM in the open market context based on a sequential combination of qualitative and quantitative research methods. The exploratory findings in the qualitative study become the basis for the quantitative study, survey research. The findings from the mixed methods explain the significance of three new factors (information sharing desire, self-presentation desire, and open market reward) and two other factors (open market satisfaction and open market loyalty) affecting eWOM directly and indirectly. This study contributes to research by adding to the broader literature on eWOM. The findings also can inform open market providers on how to promote and manage eWOM for their online business success.*

*Keywords: Electronic word of mouth, self-presentation desire, information sharing desire, open market reward, mixed methods, open market*

# 1 INTRODUCTION

There are various factors affecting a consumer's purchasing behaviour and decision-makings. Social information based on other people's input has been used as one of important decision factors. Especially, as the social network services are readily available for consumers in the online context, people can easily exchange their purchasing experiences with others. Many people reflect other consumers' information (e.g., opinion, comments, and experiences) into their purchase decisions. This trend is called Word-of-Mouth (WOM) that is regarded so influential on potential customers' purchasing behaviors and decision-makings (Richins & Root-Shaffer 1988). WOM means *interpersonal communication concerning the evaluation about products or service of interest* (Arndt 1967). The Internet is the context of online WOM to share information on products, services, transactions and other experiences. Eric (1988) regarded electronic WOM (eWOM) as a tool for consumers to exchange their information with each other.

WOM as an online feedback mechanism has been suggested in previous research as a key factor in affecting trust and online sales (Chevalier & Mayzlin 2006; Dellarocas 2003; Pavlou & Dimoka 2006; Zhu & Zhang 2010). WOM about target product or service reduces uncertainties about the target and the attendant risks in purchasing and using it; this form of reassurance may then affect development of customer trust in the target. Based on the trust, customers may decide to proceed to purchase the target. For this reason, previous research on WOM regarded the WOM-based marketing approach much more effective in the promotion of sales, compared with advertising or individual sales activities (Katz & Lazardfeld 1955). Previous research (Chevalier & Mayzlin 2006) also found WOM affects online sales. WOM is thus one of the most influential sources of marketplace information for customers (Dellarocas 2003). WOM is created and spread through online WOM platforms such as product review websites, retailers' websites, brands' websites, personal blogs, message boards, and social networking sites (Lee and Youn 2009).

This study aims to investigate factors affecting eWOM. This study conceptualizes eWOM as *an individual's information sharing and communication activities to others in target online context, i.e., open market*. We conduct this study in the context of open market. In the open market, several online vendors sell products or services to potential customers in the online market context. For example, there are several vendors selling products in eBay. eBay manages the whole online market by selecting and allowing such vendors to do their business in its online market platform. Customers may share their experiences and information about those vendors as well as those products and services they experienced in the open market context. It is important for potential customers to check the vendors as well as the products and services they are considering in the open market. There has been, however, lack of research on the factors affecting eWOM in the open market context. Most previous research on eWOM focused on online shopping malls with single vendor (e.g., Lee et al. 2011).

To develop a deeper understanding of the phenomenon related to eWOM in the open market context, we use a sequential combination of qualitative and quantitative research methods, where findings from the qualitative study empirically inform the later quantitative study. We collected qualitative data by conducting interviews with 31 customers who experienced eWOM in the open market context to explore what motivates them to do eWOM. The qualitative study results become the basis for the next quantitative study, i.e., survey research. The interviews thus substantiated the basic premise of our model. The interviews also assisted in the interpretation of specific survey results with 260 respondents, as will be discussed later. We then collected quantitative data through online surveys to empirically test the research model. This study contributes to research by adding to the broader literature on eWOM. Moreover, the study can inform Internet vendors and open market providers on how to promote and manage eWOM activities for their online business.

## 2 QUALITATIVE STUDY

We adopted an interview approach with experienced eWOM customers as a qualitative research method to explore potential factors affecting eWOM in the open market context. Although the interview approach has weaknesses such as response bias, subjective interpretation, and reflexivity, it has several strengths such as the capability to focus directly on the research topic and to deliver perceived causal inferences (Yin 2003). We had structured interviews with 31 randomly selected experienced eWOM customers (see Table 1). According to results from subjects who participated in the interview, for the gender, there were 18 males and 13 females, for the age, those aged between 20 and 29, accounting for 61 percent, and for the number of eWOM activities for a month, 87 percent of the participants showing 1-10 times of eWOM activities. The interview was a one-on-one format conducted in an informal environment and lasted from about 10 to 20 minutes. The interviewees were mainly asked the factors that affected their decision to do eWOM activities in the open market context. As an incentive, we offered a gift voucher worth US\$5 to each interviewee to ensure data integrity. The interviewees' responses were transcribed instantly.

Demographic Variable		Frequency	Percentage
Gender	Male	18	58
	Female	13	42
Age (years)	10s	2	6
	20s	19	61
	30s	7	23
	40s	3	10
WOM activity (times)	1 ~ 5	19	61
	6 ~ 10	8	26
	10 ~ above	4	13
Total		31	100.0

*Table 1. Descriptive Statistics of Respondents in the Qualitative Research*

Data compilation was mostly accomplished through in-depth interviews. Interview transcripts were thus analyzed using open, axial, and selective coding (Strauss & Corbin 1998). Coding was done by three researchers. To avoid any potential bias, we selected one coder uninvolved in the data collection. During open coding, each coder examined the interview transcripts line by line to find concepts hidden within textual data that could explain the antecedents of interviewee's eWOM. Based on the concepts thus identified, the coders discussed each concept and named it on a consensus basis. We then grouped these concepts into broad categories that reflected commonalities among codes (i.e., output from the initial open coding) during the axial coding, which helped reduce the large number of concepts and evolved into theoretical constructs. We used constructs from the existing literature, if possible, to name the categories. During this axial coding, we employed a coding scheme to classify categories into causes (i.e., eWOM antecedents) and effects (i.e., eWOM). Hypotheses began to emerge to describe antecedents of eWOM. During selective coding, we attempted to integrate these categories and relationships that we had identified into a holistic theory. This theory was tested in the following quantitative study.

Based on the interview, this research classified reasons for eWOM in open markets into five categories (see Table 2): *information sharing desire*, *self-presentation desire*, *open market reward*, *open market satisfaction*, and *open market loyalty*. As analytical results from contents on interview with 131 responses, the biggest reason for WOM activities was information sharing desire, 71 cases from total responses, accounting for 54 percent. According to the responses, the respondents wanted to share their information related to the target open market to others.

Rank	Category	Examples	Frequency	%
1	Information sharing desire	I want to share information in relation to products or services.	71	54%
		I want to exchange information with others.		
		I want to share information to prevent others from purchasing damages.		
2	Self-presentation desire	I want to show off my information power.	28	21%
		I want to show off the fact of my purchasing good products.		
		I want to gain recognition of my values from others.		
3	Open market reward	I want to get points or mileages after purchase.	15	11%
		I want to ask for economic and psychological reward.		
4	Open market satisfaction	I want to express my gratitude to sellers in the open market.	10	8%
		I want to express my dissatisfaction in the open market.		
5	Open market loyalty	I want to express my loyalty to the open market.	6	5%
		I want to conduct maniac activities or make relations with others.		
6	Others	Korean people enjoy spreading rumours.	1	1%

*Table 2. Qualitative Study Results*

There were next 28 cases related with the self-presentation desire, accounting for 21 percent, which was found as the second reason for WOM activities. According to respondents, the self-presentation desire was mainly caused by high expectancy to enhance their values through WOM and gain recognition of them from others.

There were then 15 cases related with open market reward, accounting for 11 percent. Consumers were found to conduct WOM activities to get points or mileages after purchase, as some of open markets give points or mileages according to their policies for site operation (8 cases). There were 10 cases related with customer satisfaction with target open market (i.e., open market satisfaction), accounting for 8 percent. There were 6 cases related with customer loyalty toward target open market (i.e., open market loyalty), accounting 5 percent.

Although the exploratory findings have implications for identifying potential factors affecting customers' eWOM decisions and their behaviours and showing their relative impacts on eWOM, these findings need to be tested further to confirm these exploratory results because the interview approach has limitations such as reflexivity, i.e., an interviewee says what the interviewer wants to hear (Yin 1994).

### 3 QUANTITATIVE STUDY

The exploratory study identified five factors affecting eWOM in the open market context. The exploratory findings become the basis for the research model development in the quantitative study.

#### 3.1 Research Model and Hypothesis

Based on the exploratory results in the preceding qualitative study, we proposed the research model presented in Figure 1. Although the five factors identified earlier could directly affect eWOM, there can be relationships among them.

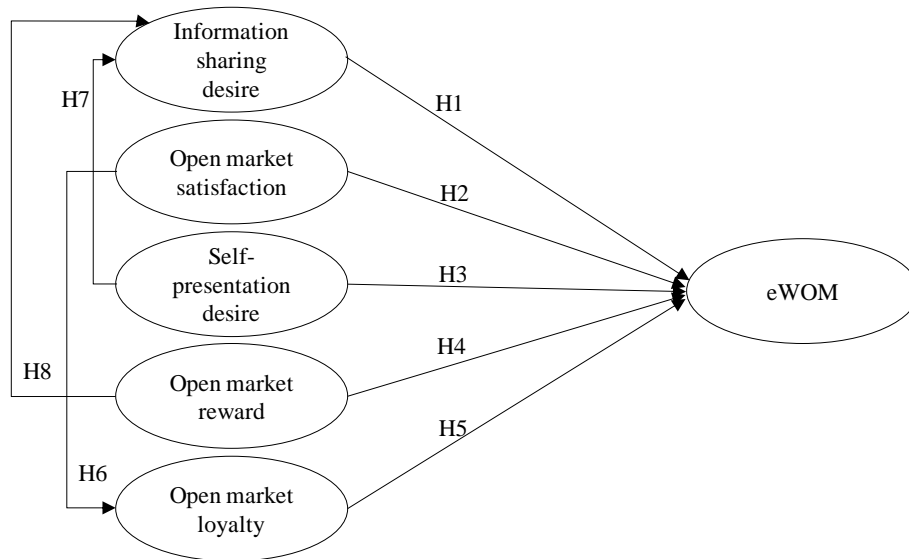


Figure 1. Research Model

We propose information sharing desire, defined as *the extent to share information on products or services with others in the open market context*, as an antecedent of eWOM. In the online context, information sharing desire takes an important role in forming an individual's attitude (Chen et al. 2002). Information sharing refers to an activity to spread information to others and share it when it is obtained. Brown and Duguid (2002) explained that the higher the individuals' abilities to utilize information, the more active they are in sharing information. It means people agree to willingly supply information for others, with significance to share valuable information. The interview results in the preceding qualitative study showed that a great number of people want to share information on products or services with others in the open market context. Any motivated behaviour must be understood as a channel through which human desire is satisfied (Maslow 2001). eWOM can thus be understood as the means of satisfaction of an individual's desire to share information with others. Therefore, information sharing desire should have a positive effect on eWOM in the open market context.

*Hypothesis 1: Information sharing desire has a positive effect on eWOM.*

We propose open market satisfaction by an individual as another antecedent of eWOM. Following Spreng et al. (1996), we define open market satisfaction by an individual as *an affective state resulting from emotional reaction to transaction experience in an open market of interest*. Customers satisfied with Internet shopping malls conduct positive WOM activities, while those unsatisfied conduct negative WOM activities and express their complaints (Lee & Youn 2009). Likewise, customers tend to write their reviews on transaction experiences as they become to have experiences and information in the target context. According to the interviews in the preceding qualitative study, both satisfaction and dissatisfaction with transaction were factors of eWOM activities in the open market context. Customers who are satisfied with transaction conduct positive WOM activities toward transaction companies (Bitner 1990; Bloch et al. 1986; Oliver 1980). This WOM is expressed as behaviours of recommending the transaction to others. Therefore, open market satisfaction by an individual customer should have a positive effect on eWOM in the open market context.

*Hypothesis 2: Open market satisfaction has a positive effect on eWOM.*

We propose self-presentation desire as another antecedent of eWOM. Following previous research (Kim et al. Forthcoming), we define self-presentation desire as *the extent to which an individual wants to present his or her preferred image in an open market of interest*. Self-presentation theory (Goffman 1959; Leary 1996) explains that people as social actors desire to present their identities to others in

social settings. Self-presentation as a key means of impression management aims to control how one is perceived by other people (Leary 1996). People try to influence other's perception of themselves through self-presentation. For the self-presentation, people can employ textual presentation. Textual presentation can be synchronous, like chatting, or asynchronous, as in message boards. Eric (1988) suggested that individuals could enhance their positions by frequently supplying appropriate and useful answers in external on-line knowledge network. In other words, self-presentation is a behavior of making a positive social impression of the self on others and optimizing the probability of avoidance of undesirable impression, which means selective expression such as prominence of his or her advantages and omission of negative information in relation to himself or herself (Leary 1996; Leary & Kowalski 1990). Therefore, self-presentation desire should have a positive effect on eWOM in the open market context.

*Hypothesis 3: Self-presentation desire in the open market has a positive effect on eWOM .*

Open market reward means *the compensations for any information sharing with others related to products or services in an open market of interest*. Reward includes all types of positive or attractive compensation given to a performer on a specific behavior. Similar to the frequency program of airline companies, there are various incentive systems using mileages or a small amount of compensation (e.g., Gmarket coupon) to encourage participation of consumers and improve the quality of information reward in the open market context. When an individual perceives that rewards exceed costs in conducting behaviour of interest, the behaviour tends to actively occur (Kelly & Thibaut 1978). When an open market provides compensation to those customers who share their ideas and experiences (i.e., eWOM) with other in the same context, those customers may conduct eWOM activities, especially when the rewards exceed costs (e.g., time and efforts). An individual would conduct eWOM activities to get the reward from the open market of interest. The exploratory findings in the qualitative study explain that people want to receive economic or psychological reward related to their eWOM activities. Therefore, open market reward should have a positive effect on eWOM in the open market context.

*Hypothesis 4: Open market reward has a positive effect on eWOM.*

Loyalty refers to a commitment to repetitively purchase a preferable product or service or to become a regular customer (Oliver 1999). In case of online shopping malls suffering from severe customer churn, loyalty is regarded as a more important concept (Oliver 1980). It becomes a factor for continuous retention of customers and maintenance of long-term relationship. Open market loyalty means an *individual's psychological attachment to an open market of interest*. There are several consequences of loyalty toward a vendor, such as repeating purchase and recommendation of the vendor to others (i.e., WOM). If an individual has a psychological attachment toward an open market (i.e., open market loyalty) then the person would be willing to share his or her experiences with others. Therefore, open market loyalty should have a positive effect on eWOM in the open market context.

*Hypothesis 5: Open market loyalty has a positive effect on eWOM .*

Customer satisfaction has strong influence on trust, and commitment, and the trust and commitment in turn take significant effects on customer's loyalty behavior (Park 2003). Previous research explains that customer satisfaction influences customer loyalty (Heskett et al. 1994). While open market satisfaction represents emotional reaction to the open market of interest, open market loyalty represents psychological attachment to the open market. Therefore, open market satisfaction should have a positive effect on the open market loyalty.

*Hypothesis 6: Open market satisfaction has a positive effect on open market loyalty.*

In addition to the direct effect of self-presentation desire on eWOM, self-presentation desire can have an indirect effect on it through the information sharing desire. If an individual has a strong desire in self-presentation, the person would have stronger desire to share their information and experiences with other by taking the textual self-presentation approach. That is, an individual can build a desire

before conduct behaviour of interest to satisfy the desire. Self-presentation desire, therefore, should have a positive effect on the information sharing desire in the open market context.

*Hypothesis 7: Self-presentation desire has a positive effect on the information sharing desire.*

In addition to the direct effect of open market reward on eWOM, open market reward can have an indirect effect on it through the information sharing desire. When the target open market provides rewards for the eWOM activities, customers in the target market would have a stronger desire to share information and their experiences with others. That is, an individual can build a desire before conduct behaviour of interest to satisfy the desire. Therefore, open market reward should have a positive effect on the information sharing desire.

*Hypothesis 8: Open market reward has a positive effect on the information sharing desire.*

### 3.2 Data collection and Analysis

#### 3.2.1 Data collection and Instrument Development

For survey instrument development, we adopted existing validated scales wherever possible. Two information systems (IS) researchers and one marketing researcher reviewed the survey instrument and checked its face validity. The measurement instrument was reviewed in a focus group of five online customers who experienced open market and eWOM activities. The scales are shown in Table 3.

Construct	Item	Wording	Reference
Information sharing desire	ISD1	I want to share information that enables transaction to be sensible in the open market.	Self-developed
	ISD2	I hope to share product information that I bought in the open market.	
	ISD3	I wish to share service information that I had in the open market.	
	ISD4	I want to share information about the seller that I transacted in the open market.	
Open market satisfaction		I am ... with my transaction in this open market.	Spreng et al. (1996).
	SAT1	Unsatisfied ... Satisfied	
	SAT2	Frustrated ... Contented	
	SAT3	Annoyed ... Pleased	
Self-presentation desire	SPD1	I hope to leave a good impression in the open market.	Kim et al. (Forthcoming)
	SPD2	I want to present a good image in the open market.	
	SPD3	I wish to make a good image in the open market.	
Open Market reward	RWD1	There are rewards according to sharing information to others in the open market.	Malhotra & Galletta (1999)
	RWD2	In the open market, sharing information enables us to get a lot of benefits.	
	RWD3	There are incentives according to sharing information to others in the open market	
Open market loyalty	LYT1	I am a regular customer in this open market.	Garbarino & Johnson (1999)
	LYT2	I have a strong attachment in this open market.	
	LYT3	I hope that this open market will succeed in internet business.	
eWOM	WOM1	I often tell so many things about transaction in the open market to others	Thomas et al. (2006)
	WOM2	I often introduce experience of previous dealing in the open market.	
	WOM3	I often tell the features of products or services in the open market to	



	others.	
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*Table 3. Measurement Instrument*

We conducted online survey with customers of major six open markets in Korea (e.g., Gmarket, Auction, 11<sup>TH</sup> Street, and Interpark) and persons experienced in using them, with limitation on subjects experienced in purchasing products in those open markets. A database from a market research firm was used to create a sample of panel members who were at least 19 years of age. The market research firm randomly selected members from the panel pool, each of whom was invited by e-mail to participate in the survey. The e-mail included a link to a Web-based survey questionnaire. At the beginning of the online survey, we asked survey participants to select an open market that they have ever experienced. We then asked them to answer the survey questions by considering the selected open market. There were a total of 260 respondents (see Table 4). About 77 percent of the respondents were males, and among them, those aged in their twenties and thirties accounted for 80 percent of total respondents. Their average age was 25 years old, and about 73 percent of the total respondents were office workers.

Demographic Variable		Frequency	%
Gender	Male	200	76.9 %
	Female	60	23.1 %
Age (Average: 25yrs)	10s	25	9.6 %
	20s	106	40.8 %
	30s	103	39.6 %
	40s	23	8.8 %
	50s	3	1.2 %
Job	Middle(High) school student	25	9.6 %
	(Under)graduate student	46	17.7 %
	Worker	189	72.7 %
Total		260	100.0 %

*Table4. Descriptive Statistics of Respondents in Quantitative Research*

### 3.2.2 Instrument Validation

Data analysis for this study was performed in accordance with a two-stage methodology using PLS-Graph version 3.00. Convergent validity is the degree with which the items of a given construct are measuring the same underlying latent variable. Convergent validity is assessed using three criteria. First, standardized path loadings, which are indicators of the degree of association between the underlying latent factor and each item, should be greater than 0.7 and statistically significant. Second, the composite reliabilities, as well as the Cronbach's alphas, should be larger than 0.7. Third, the average variance extracted (AVE) for each factor should exceed 50 percent. As shown in Table 5, the standardized path loadings were all significant and greater than 0.7. The average variance extracted (AVE) for each construct was greater than 0.5. The composite reliability (CR) and the Cronbach's  $\alpha$  for all constructs exceeded 0.7. The convergent validity for the constructs was supported.

Construct	Item	Std. loading	AVE	CR	Cronbach's $\alpha$
Open market satisfaction	SAT1	0.90	0.87	0.95	0.92
	SAT2	0.95			
	SAT3	0.95			
Information sharing desire	ISD1	0.76	0.68	0.89	0.84
	ISD2	0.88			
	ISD3	0.90			

	ISD4	0.74			
Open market loyalty	LYT1	0.83	0.72	0.88	0.80
	LYT2	0.90			
	LYT3	0.81			
Open market reward	RWD1	0.93	0.88	0.96	0.93
	RWD2	0.95			
	RWD3	0.92			
Self-presentation desire	SPD1	0.95	0.94	0.98	0.97
	SPD2	0.98			
	SPD3	0.97			
eWOM	WOM1	0.92	0.87	0.95	0.93
	WOM2	0.95			
	WOM3	0.94			

Table 5. The Result of Convergent Validity Test

Discriminant validity means the degree to which the measures of two constructs are empirically distinct. We assessed the discriminant validity of the measurement model by comparing the square root AVE for each construct with the correlations between the construct and other constructs. If the square root of AVE is greater than the correlations between the construct and other constructs then it indicates the discriminant validity. As shown in Table 6, the square root of AVE for each construct (diagonal term) exceeded the correlations between the construct and other constructs. Hence, discriminant validity of the instruments was supported.

	Mean	Std. Dev.	ISD	SAT	SPD	RWD	LYT	WOM
ISD	4.71	1.27	<b>0.82</b>					
SAT	4.87	1.09	0.31	<b>0.93</b>				
SPD	4.17	1.46	0.34	0.34	<b>0.97</b>			
RWD	3.60	1.42	0.25	0.27	0.28	<b>0.94</b>		
LYT	4.09	1.32	0.35	0.45	0.41	0.37	<b>0.85</b>	
WOM	3.84	1.46	0.32	0.22	0.35	0.37	0.54	<b>0.93</b>

Table 6. Correlations between latent constructs

ISD: Information sharing desire, SAT: open market satisfaction, SPD: self-presentation desire, RWD: open market reward, LYT: open market loyalty, WOM: electronic word of mouth

After establishing the validity of the measurement instrument, we examined the structural model by applying a bootstrapping resampling technique (see Figure 2). The results indicate that information sharing desire (H1), self-presentation desire (H3), open market reward (H4), and open market loyalty (H5)) had significant effects on the eWOM, explaining 36 percent of its variance. Open market satisfaction (H6) had a significant effect on the open market loyalty, explaining 23 percent of its variance. Self-presentation desire (H7) and open market reward (H8) had significant effects on information sharing desire, explaining 15 percent of its variance. However, we could not find a significant effect of open market satisfaction (H2) on the eWOM.

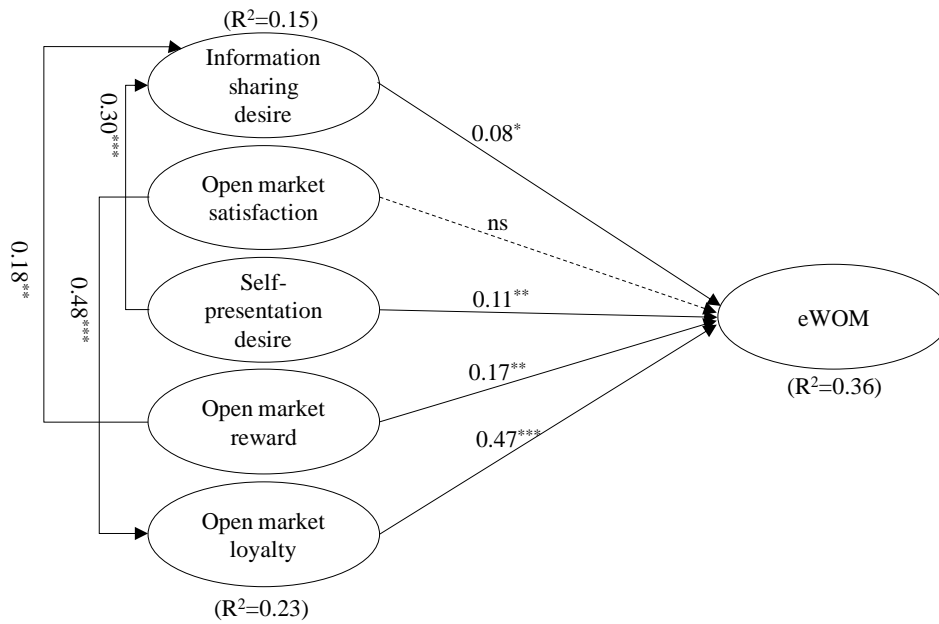


Figure 2. Testing Results of the Structural Model

## 4 DISCUSSION AND IMPLICATIONS

### 4.1 Discussion of Findings

This research, consisting of an exploratory study and a confirmatory main study, has several important findings. First, information sharing desire in the open market has a positive effect on the eWOM activity. It means that people agree to willingly give information for others, with the significance to share valuable information. Interview respondents were shown to want to share information, ranging from contents of transactions, such as products or services, or prices to secondary information obtained through transactions, for example, impressions during the use of products, improvement plans and measures for products or services. As the open market is a space where various sellers can compete with each other regarding the same products or services, more traces of information sharing (e.g., purchase postscripts) make it easier to lead other customers to select a seller and conduct transactions effectively. Accordingly, more friendly information on products or services, obtained by proper use of consumers' information sharing desire, can contribute to improvement of sales performance.

Second, self-presentation desire in the open market has a positive effect on the eWOM activity. People want to communicate their purchases of products or services to others in the open market to present their identities. That is, the desire for projecting a preferred image or impression to the group can motivate the purchase and use of objects for self-presentation (Schau & Gilly 2003). People then try to influence other's perception of themselves through self-presentation. According to the exploratory findings in the qualitative study, there were cases where some customers who had bought expensive and limited products felt proud and envied by others through eWOM activity. Self-presentation is thus a process where a person tries to control his or her image formed by others, which could lead to eWOM activities in the open market context.

Third, open market reward has a positive effect on the eWOM activity. Most open markets selected in this study support monetary benefits or reward such as points or mileages to consumers who write their purchase postscripts in order to encourage eWOM activities in their open market context. The exploratory finding results explain that many people responded that they frequently used monetary

benefits obtained in reward for their purchase postscripts and were motivated to do eWOM activities. The exploratory findings also explain that some people, regardless of monetary benefits, responded that they conduct eWOM activities as a token of gratitude for good transaction or wanted to enhance self-achievement by helping others.

Fourth, open market loyalty has a positive effect on the eWOM activity. Previous research on marketing demonstrated that customer loyalty toward a vendor leads to the customer's WOM activities toward the vendor (e.g., Bloemer et al. 1998). Moreover, loyalty in the marketing has been used as a tool for measuring the success of marketing strategies (Knox & Walker 2001). In line with this, an individual's loyalty toward an open market should lead to the person's WOM in the open market context. In contrast to the significant effect of open market loyalty on eWOM, we could not find the significant effect of open market satisfaction on eWOM. According to Richins (1983) and Anderson (1998), both satisfaction and dissatisfaction with transaction have an effect on WOM, and particularly dissatisfaction has a greater effect. In other words, it seems that customers do more active WOM activity in a moment of dissatisfaction with transaction, rather than satisfaction, and such bad moment remains longer in their memories. The survey in this study was conducted with consumers who have experienced in transaction in the selected open market. In this regard, it is judged that the respondents would remember an experience of dissatisfaction much longer, instead of that of satisfaction among previous experiences, and maybe their responses were based not on experience of satisfaction but on that of dissatisfaction. The other potential reason of this insignificance is the mediating effect of open market loyalty on the relationship between open market satisfaction and eWOM. As the testing results show, open market satisfaction has a significant effect on eWOM indirectly through open market loyalty.

Next, this study found that information sharing desire is influenced by both self-presentation desire and open market reward. That is, open market reward has a significant effect on eWOM directly and indirectly through information sharing desire. Self-presentation desire also has a significant effect on eWOM directly and indirectly through information sharing desire.

## **4.2 Limitations and Future Research**

The results of this study must be interpreted in the context of its limitations. First, the data for this study was collected from the open market customers in Korea. Those open market providers in Korea employ several unique operation policies such as frequency program (e.g., point accumulation) to encourage eWOM activities of their customers. In comparison, there are many other open market providers encouraging their customers' voluntary eWOM activities. It would be useful to replicate this study with a number of open markets in different regions so that the robustness of the results can be established. Second, we conceptualized eWOM as the interpersonal communications in the open market context. There can be negative and positive contents in the communications. Customers could conduct eWOM in different ways depending on the valence of the contents (i.e., positive and negative). Customers could conduct eWOM more actively when they are unsatisfied than when they are satisfied. Future research, therefore, needs to select either negative or positive valence of eWOM and examine their antecedents. Next, it is known that emotions have implications for action and goal attainment (Bagozzi et al. 1999). When one experiences a negative emotion, the person is in disequilibrium and wish to return to his or her normal state. According to the coping responses (Lazarus 1991), the person may use either one or both of two coping processes: problem-focused coping, where the person attempts to alleviate the sources of distress, or emotion-focused coping, where the person with changes the meaning of the sources of distress or avoid thinking about a problem. When an individual experiences unsatisfactory deal in an open market, the person may conduct eWOM activities with negative contents by using either problem-focused coping or emotion-focused coping. Especially, negative emotion could have stronger effects on action than positive emotion. Future research, therefore, needs to examine open market dissatisfaction (i.e., negative emotional responses) and eWOM.

### 4.3 Implications for Research and Practice

This research has several implications for research. This study identified and examined the factors affecting eWOM in the open market context. While there have been several research on eWOM, most previous studies (e.g., Chevalier & Mayzlin 2006; Pavlou & Dimoka 2006; Zhu & Zhang 2010) examined the role and consequences of WOM. In addition, many of previous research on eWOM (e.g., Lee et al. 2011) have focused on typical online shopping context with a vendor (e.g., Amazon.com). While many electronic commerce businesses adopted the open market approach in their online business, there has been lack of consideration about the open market context. Furthermore, there has been lack of research on the factors affecting eWOM in the open market context. This research is one of limited studies examining the antecedents of eWOM in the open market context.

The findings in this study also have an implication for research. Previous research has identified several antecedents (e.g., satisfaction and loyalty) of WOM in the online shopping context. Especially, customer loyalty and satisfaction have been suggested as key antecedents of WOM in the marketing research (e.g., Bitner 1990; Bloch et al. 1986; Oliver 1980). Compared to previous research on WOM, this study identified several antecedents of eWOM in the open market context and their significance. Especially, this study is one of few studies identifying the roles and effects of three new factors (i.e., information sharing desire, self-presentation desire, and open market reward) related to the eWOM. Self-presentation desire has been used in explaining why people are motivated to purchase digital items on virtual community websites (Kim et al. forthcoming). This study shows that the self-presentation desire additionally leads to eWOM activities in the open market context. This study also shows the role and effect of information sharing desire. Previous research explained knowledge contribution or knowledge sharing in terms of altruism and reciprocity (e.g., Adler 2001). Information sharing desire is related to altruism and reciprocity. The first case, altruism, explains that people share information and knowledge with others without expecting reward or future reciprocation. The second case, reciprocity, explains that people share information and knowledge with other based on the expectation of future reciprocation. This study also showed the role and effect of open market reward. While reward has a negative effect on knowledge sharing attitude in an organization context (Brock et al. 2005), this study showed the positive effect of open market reward on eWOM in the open market context.

This study has another implication in terms of the mixed methods approach, a sequential combination of qualitative and quantitative research methods. The qualitative research method with the interview approach has an advantage in exploring the factors affecting eWOM in the selected context. The quantitative research method with the survey approach has another advantage in testing and validating the explored or identified factors in the selected context. The mixed method is helpful in developing a deeper understanding of target phenomenon (Venkatesh et al. forthcoming). This study thus has an implication in the application of the mixed methods.

This research also has several implications for practice. Especially, the findings provide guidance for tapping the motivators of eWOM in the open market context. The findings explain the key roles and direct effects of four factors (information sharing desire, self-presentation desire, open market reward, and open market loyalty) on eWOM. As for self-presentation desire, open market providers can consider promoting self-presentation in the open market context. For this purpose, they can consider developing a norm (i.e., members or customers should present themselves) in the open market. In line with this, the open market providers can consider promoting their members' virtual community participation and activities in their open market. The open market providers also need to consider providing rewards for their members' eWOM activities because the findings explain the significant effect of open market reward on eWOM. The open market providers can consider adopting a certain approach like the frequency programs of airline companies. For now, according to the reward system of open markets, monetary benefits have been mainly supplied to encourage participation in WOM activity. However, both psychological reward as well as monetary benefits can be influential in leading to eWOM activities in the open market context. This result suggests the necessity of extending

areas of reward in the open market and reconsidering the meaning of reward to customers. The open market providers also need to consider developing their members' loyalty toward the open market based on the significance of open market loyalty. It is necessary to satisfy open market customers first to gain their loyalty as the finding shows. The findings also explain that information sharing desire can be increased by both self-presentation desire and open market reward.

## 5 CONCLUSION

WOM has been identified as one of key factors affecting trust and online sales (Dellarocas 2003). Based on the key role and its significant effect, previous research examined WOM in several contexts such as typical offline marketing context and online shopping context. As the open market approach has been adopted by many online vendors, however, there is a limitation in understanding the context-specific factors in affecting online WOM (i.e., eWOM) activities in the open market context. This study is one of limited studies examining eWOM and its antecedents in the open market context. For this study, we adopted a mixed methods approach, a sequential combination of qualitative and quantitative research methods. The qualitative research method was useful in exploring the open market-related factors. Going beyond previous research on WOM, this study thus has contributions in extending our understanding about eWOM and its antecedents in the open market context. Especially, this study found three new factors (information sharing desire, self-presentation desire, and open market reward) affecting eWOM as well as two other factors (open market satisfaction and open market loyalty) affecting eWOM directly and indirectly. The findings also provide guidance for tapping the motivators of eWOM in the open market context.

## References

- Adler, P. S. (2001). Market, hierarchy, and trust: The knowledge economy and the future of capitalism. *Organization Science*, 12(2), 215-234.
- Anderson, E. W. (1998). Customer Satisfaction and Word of Mouth. *Journal of Service Research*, 1, 5-17.
- Arndt, J. (1967). Role of product-related conversations in the diffusion of a new product, *Journal of Marketing Research*, 4(3), 291-295.
- Bagozzi, R. P., Gopinath, M. and Nyer, P. U. (1999). The role of emotions in marketing. *Journal of the Academy of Marketing Science*, 27 (2), 184-206.
- Bitner, M. J. (1990). Evaluating service encounters: the effects of physical surroundings and employee responses. *Journal of Marketing*, 54 (2), 69-82.
- Blau, P. (1967). *Exchange and Power in Social Life*. Wiley, New York.
- Bloch, P. H., Sherrell, D. L. and Ridgway, N. M. (1986). Consumer search: An extended framework. *Journal of Consumer Research*, 14, 119-127.
- Bloemer J., Ruyter K. and Pascal P. (1998). Investigating drivers of bank loyalty: the complex relationship between image, service quality and satisfaction. *International Journal of Bank Marketing*, 16(7), 276 – 286.
- Bock, G. W., Zmud, R. W., Kim, Y. G. and Lee, J. N. (2005). Behavioral intention formation in knowledge sharing: examining the roles of extrinsic motivators, social-psychological forces, and organizational climate. *MIS Quarterly*, 29(1), 87-112.
- Brown, J. S. and Duguid, P. (2002). Local knowledge: Innovation in the networked age. *Management Learn*, 33, 427-437.
- Cha, T. H. and Lee, K. A. (2006). Acceptance of Online Word-of-Mouth on Internet : Focus on Online Feedback System of Online Shopping Mall. *KOBACO*, 72, 223-252.
- Chen, Q., Clifford, S. J. and Wells, W. D. (2002). Attitude Toward the Site II : New Information. *Journal of Advertising Research*, March-April, 33-45.
- Chen, Y. and Xie, J. (2004). *Online Consumer Review: A New Element of Marketing Communications Mix*. Working Paper, Department of Marketing, University of Florida.

- Chevalier, J. A. and Mayzlin, D. (2006). The effects of word of mouth on sales: Online book reviews. *Journal of Marketing Research*, (XLIII), 345-354.
- Coleman, J.S., Katz, E. and Menzel, H. (1966). *Medical Innovation: A Diffusion Study*. Indianapolis, IN: Bobbs-Merrill.
- Dellarocas, C. (2003). The Digitization of Word of Mouth: Promise and Challenges of Online Feedback Mechanisms. *Management Science*, 49 (10), 1407-1424.
- Donath, J. S. (1998). *Identity and deception in the virtual community*. In P. Kollock & M. Smith (Eds.), *Communities in Cyberspace*, 29-59. London: Routledge.
- Engel, J. E., Roger, D., Blackwell, and Robert, J. K. (1969). How information is used to adopt an innovation. *J Advert Res*, 9 (3).
- Eric, V. H. (1988). *The sources of innovation*. New York Oxford University Press.
- Fishbein, M. and Ajzen, I. (1975). *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research*. Reading, MA: Addison-Wesley.
- Garbarino, E. and Johnson, M. S. (1999) The Different Roles of Satisfaction, Trust, and Commitment in Customer Relationships. *Journal of Marketing*, 63 (2), 70-87.
- Goffman, E. *The presentation of self in everyday life*. New York: Doubleday, 1959.
- Go, I. S. and Choi, S. J. (2006). A Study on Influence of Trust and Intimacy on Customer Loyalty in Internet Shopping Malls. *Journal of Management Information Systems*, 15 (3), 187-208.
- Han, J. W., Yoo, C. W. and Choe, Y. C. (2008). The Factors to Promote Internet Knowledge Sharing: Based on Social Capital Theory and Self-Expression Concept. *Korea Management Information Systems Conference*, 866-871.
- Heskett, J. L., Jones, T. O., Loveman, G. W., Sasser, W. E. and Schlesinger, L. A. (1994). Putting the service profit chain to work. *Harvard Business Review*, March-April, 105-11.
- Katz, E. and Lazarsfeld, P. F. (1955). *Personal Influence*. Glencoe, IL: Free Press.
- Kelley, H. H. and Thibaut, J. W. (1978). *Interpersonal Relations: A Theory of Interdependence*. Wiley, New York, 1978.
- Kim, H. W., Chan, H. C. and Kankanhalli, A. (Forthcoming). What motivates people to purchase digital items on virtual community websites? The desire for online self-presentation. *Information Systems Research (ISR)*.
- Knox, S.D. and Walker, D. (2001). Measuring and Managing Brand Loyalty. *Journal of Strategic Marketing*, 9, 111-128.
- Kotler, P., Armstrong G., Saunders J. and Wong V. (1996). *Principles of marketing, european edition*. Pearson, 984.
- Lazarus, R. S. (1991). *Emotion and Adaptation*. New York: Oxford University Press.
- Lee, J. H., Koh, J. and Kim, H. W. (2009). The Effect of Motivation-Reward Fit on Commitment and Knowledge Sharing Activities in Communities of Practice. *The KIPS Transactions*, 17 (3), 209-222.
- Lee, J. R. (2006). Understanding on Influential Factors of Purchaser Satisfaction and Preference on Open Markets: A Comparative Study of Open Markets and Total Internet Shopping malls. *Asia Pacific Journal of Information Systems*, 16(4), 49-70.
- Leary, M. R. (1996). *Self-Presentation: Impression Management and Interpersonal Behavior*, Westview Press: Madison.
- Leary, M. R. and Kowalski, R. M. (1990). Impression management: A literature review and Two component model. *Psychological Bulletin*, 107(1), 34-37.
- Lee, J., Lee, J. N. and Shi, H. (2011). The long tail or the short tail: The category-specific impact of eWOM on sales distribution. *Decision Support Systems*, 51(3), 466-479.
- Lee, M. and Youn, S. (2009). How eWOM platforms influence consumer product judgment. *International Journal of Advertising*, 28(3), 473-499.
- Lee, M. K. (2002). e - SERVQUAL – A Scale for Measuring Consumer Evaluations of Internet Service Quality. *Marketing Research*, 17(1), 73-95.
- Lee, Y. J. (2000). Synthetic Consideration of Customer Satisfaction Researches. *Journal of Consumer Research*, 11 (2), 139-166.

- Malhotra, Y. and Galletta, D. F. (1999). Extending the technology acceptance model to account for social influence: Theoretical bases and empirical validation. *Proceedings of the 32nd Hawaii International Conference on System Sciences*, 1999.
- Maslow, A. H. (2001). *A theory of human motivation*. W. E. Natemeyer, J. T. McMahon, eds. Classics of organizational behavior. Prospect Heights, Illinois: Press, Inc., 55-72.
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 495-507.
- Oliver, R. L. (1992). An investigation of the attribute basis of emotion and related affects in consumption: suggestions for a stage specific satisfaction framework, in: J. Sherry, B. Sternthal (Eds.). *Advance in Consumer Research*, 19, 237-244.
- Oliver, R. L. (1999). Whence customer loyalty?. *Journal of Marketing*, 63, 33-44.
- Park, J. C. (2003). The Effect of Internet Shopping Mall User's Customer Satisfaction on Trust, Commitment, and Customer Loyalty Behaviors. *Asia Pacific Journal of Information Systems*, 13(3), 131-149.
- Pavlou, P. A. and Dimoka, A. (2006). The nature and role of feedback text comments in online marketplaces: Implications for trust building, price premiums, and seller differentiation. *Information Systems Research*, 17(4), 392-414.
- Reichheld, F. F. and Schefter, P. (2000). E-loyalty Your Secret Weapon on the Web. *Harvard Business Review*, 417-444.
- Reichheld, F. F. and W. Earl Sasser Jr. (1990). Zero Defections: Quality Comes to Services. *Harvard Business Review*, 68, 105-111.
- Richins, M. L. (1983). Negative Word-of-Mouth by Dissatisfied Consumers: A Pilot Study. *Journal of Marketing*, 47, 68-78.
- Richins, M. L. and Root-Shaffer, T. (1988). The role of involvement and opinion leadership in consumer word-of-mouth: An implicit model made explicit. *Advances in Consumer Research*, 15, 32-35.
- Schau, H. J. and Gilly, M. C. (2003). We Are What We Post? Self-Presentation in Personal Web Space. *Journal of Consumer Research*, 30(3), 385-404.
- Senecal, S. and Nantel, J. (2004). The Influence of Online Product Recommendations on Consumers' Online Choices. *Journal of Retailing*, 80, 159-6.
- Spreng, R. A., MacKenzie, S. B. and Olshavsky, R. W. (1996). A re-examination of the determinants of consumer satisfaction. *Journal of Marketing*, 60, 15-32.
- Strauss A. L. and Corbin J. M. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Sage Publications.
- Thomas, W. G., Talai, O. and Andrew, J. C. (2006). eWOM: The impact of customer-to-customer online know-how exchange on customer value and loyalty. *Journal of Business Research*, 59, 449 – 456.
- Venkatesh, V., Brown S. and Bala, H. (Forthcoming). Bridging the qualitative-quantitative divide: Guidelines for conducting mixed methods research in information systems. *MIS Quarterly*.
- Yin, R. K. (2003). R. Yin, *Case Study Research: Design and Methods*. 3rd ed. 2003, Thousand Oaks, California: Sage Publications. 200.
- Zhu, F. and Zhang, X. M. (2010). Impact of Online Consumer Reviews on Sales: The Moderating Role of Product and Consumer Characteristics. *Journal of Marketing*, 74 (2), 133-148.