ISSN: 2288-7709 © 2018 ICMA. http://www.icma.or.kr doi: http://dx.doi.org/10.20482/jemm.2018.6.4.51

# The Influences of Restaurant Consumers' Electronic Word-of-Mouth(E-WOM) Information Communication on Product Perception Risk, Benefit and WOM Effect

# <sup>1</sup>Yeong-Uk Heo

1. *First Author*, Professor in Department of Wine Fermentation and Food & Beverage Service at U1 University. hyw7570@u1.ac.kr.

Received: : December 20, 2018., Revised: December 24, 2018., Accepted: December 26, 2018.

#### Abstract

**Purpose** – This study is intended to look into the influences of restaurant consumers' e-WOM information communication on product perception risk, benefit and WOM effect.

**Research design, data, and Methodology** – To achieve this, a survey was empirically carried out to 426 restaurant consumers.

**Results** – The findings are as follows. First, the influence of e-WOM on product perception risk showed that WOM information sender characteristics, WOM information recipient characteristics and online community had a statistically significant positive influence on product perception risk. Second, the influence of e-WOM on product risk benefit showed that WOM information sender characteristics, WOM information recipient characteristics and online communication had a statistically significant positive influence on product risk benefit. Third, WOM risk perception had a statistically significant positive influence on WOM acceptance. Fourth, WOM risk benefit had a statistically significant positive influence on WOM acceptance.

**Conclusions** – As for the above-mentioned findings, the communication between e-WOM sender and recipient had a positive influence on the product evaluation and attitude change in the restaurant industry, and the WOM effect had an influence on the financial performance and non-financial performance. The communication attaches importance to a direct using and tasting experience due to the nature of restaurant industry when it is simultaneously performed as a positive mechanism between sender and recipient through each channel of these factors. But the e-WOM culture can lead to the WOM effect when both sender and recipient share the persuasive communicability in reality that diversifies communication methods, having a positive influence on the management performance.

**Keywords:** E-WOM, Information Communication, Product Perception Risk, Product Perception Benefit, WOM Effect.

## 1. Introduction

Product information, provided by companies and advertisers, is likely to create distorted information for profit, and consumers have a rejecting mentality about this information. However, the information, gained through friends or consumers, is believed to be true, and you naturally accept their proposals in your purchasing behavior(Schiffman & Kanuk, 2000). Therefore, the testimonial from consumers who have already purchased and used the product is an important information source and judgment criterion for consumers who want new purchases. Product information or alternative evaluation, conveyed by mouth, is called word-of-mouth(WOM) communication(Park Sung-hwi, 2011).

The WOM communication made online such as the Internet has developed into a new form of e-WOM, and the influence of e-WOM has increased. The WOM communication, which had been made on an implicit and personal

basis, has been openly and collectively made through the Internet and SNS, increasing the scope and spreading rate of communication(Park Chan, Yoo Chang-jo, 2006).

As online becomes an important communication medium, e-WOM is being actively done in an online environment through various social network services(Jung Ki-han, Jung Ji-hee, Shin Jae-ik, 2010).

As such, companies have spent a lot of money on e-WOM after it was found that the effect of WOM on online media has a great influence on the success or failure of companies. Not only domestic restaurants are able to realize efficient marketing with low cost through social media, but also consumers are able to make sensible purchasing decisions and optimal choices by minimizing the uncertainty of food products and the perceived risk before purchasing(Nam Jang-hyun, Kim Yong-il, Hyun Yong-ho, 2013; Kim Ki-jin, Sung Tae-jong, Lee Won-kap, 2011).

In the restaurant market, information is spreading more rapidly through media such as SNS than in other markets, and restaurants are engaged in multilateral marketing activities by using this actively(Park Jin-young, 2015). As such, despite the results that the use and importance of online media is emphasized in terms of time and the profit from online is higher than that from offline, studies on e-WOM in the restaurant field are very limited(Medical Food: Jang Soon-ok, Lee Yeon-jung, 2012; Famous Restaurant Blog: Song Heung-kyu, 2015; Restaurant: Park Jin-young, 2015; Restaurant Consumer: Kim Ki-young, Heo Yeong-wook, 2011; Song Heung-kyu, 2015; Restaurant Industry: Lim Sung-taek, Jo Won-sup, 2011). In particular, Bickart and Schindler(2001), Chatterjee(2001), Elliott(2002) and Newman(2003) have been studying e-WOM communication, but most of their studies have reaffirmed the influence variables of traditional WOM.

In addition, although Bickart and Schindler(2001) and Elliott(2002) have put forward the properties of e-WOM, it is hard to find systematic studies that deal only with the general characteristics of online information and demonstrate the relationship between online network characteristics and WOM performance. Therefore, the purpose of this study is to put forward interdisciplinary and industrial implications by empirically examining the effect of WOM information communication about restaurant information in online media on product evaluation, attitude and WOM effect.

#### 2. Theoretical Background

## 2.1. Characteristics of E-WOM Information in Restaurant Industry

After e-WOM communication made remarkable growth with the spread of the Internet, the mass media have overwhelmed the influence of e-WOM communication. A study on restaurant customers' information search behavior by Kim Jae-whee, et al.(2007) showed that 33.7% of them acquired restaurant information through the Internet. Nowadays, when searching through the Internet is commonplace, customers' behavior to search the review about restaurants online and collect restaurant information can have a tremendous effect on restaurant WOM communication(Kim Ki-young, Heo Yeong-wook, 2011). In this way, WOM communication through the Internet is called 'Internet WOM' or 'On-line WOM'(Sung Young-shin, Yoo Hyung-ryul, Jang In-sook, 2001; Bickart & Schindler, 2001; Chatterjee, 2001). The e-WOM communication has become one of the most influential communication means in modern society(Kim Jae-whee, Park Ha-chul, Lee Ji-sun, 2007). Lee Eun-young and Lee Tae-min(2005) said that e-WOM communication between company and them about product- and consumption-related information based on their experience or knowledge. Seo Hyun-jin and Lee Kyu-hye(2013) said that WOM effect also depends on these attributes as a process of online exchange.

As such, characteristics of e-WOM information are one of factors that help WOM recipients determine the reliability of WOM information. Therefore, this study tries to reflect and measure these attributes according to the characteristics of communication between sender of information sharing experience and recipient who heard this from the customer perspective of restaurant' own WOM information

#### 2.2. Characteristics and Perceived Risk of E-WOM Information

The risk perception theory was a concept first introduced by Bauer(1960) in the consumer behavior field, which means uncertainty of the recipient from the source if the decision-making outcome of product purchase can not be predicted(Schiffman & Kanuk, 2000; Assael, 2004), consumer's perception of uncertainty about the outcome after service or product purchase(Dawling, 1999), or subjective expectation of loss(Sweeney et al., 1999). Purchase

decision making is a process that minimizes the risk perceived by the consumer, and the perceived risk may not only vary from individual to individual, but the contents also may depend on product(Nam Jang-hyun et al., 2013).

Consumers can not directly deal with the seller when purchasing online and can only access the product information with images, pictures and videos provided only on the screen, and the perceived risk due to multiple factors including fear of online purchasing methods such as pre-payment tends to be higher(Lee Eun-young, Lee Tae-min, 2005). In particular, in areas of high perception for the food-related potential risk, restaurant consumers have a strong tendency to pay more serious attention to the outcome(Yeung & Morriss, 2001), so they have to make a decision in the direction of minimizing the perceived risk to lead to follow-up behaviors such as visit decision making(Je Min-ji, Kim Yeong-kuk, 2011). Therefore, if the perceived risk is high, information recipients are less likely to accept the message(Smith, 2002). Based on these theoretical criteria, the risk perception of product in this section is reflected and measured as the perceived risk of physical, functional, psychological, and economical food by WOM information in the restaurant industry.

#### 2.3. Characteristics and Perceived Benefit of E-WOM Information

The perceived benefit refers to consumers' perception of benefit in terms of economy, socio-psychology, symbol, function and expression(Song Heung-kyu, 2014). This implies a consumers' perception of the overall superiority that they evaluates the outcome, product or service of increasing individual utility or providing individual value by facilitating the achievement of higher-level goal or value(Kim et al., 2008). In other words, The perceived benefit is a outcome perceived in the attributes of product or service, which an attribute is defined as a number of different benefits(Peterson, 1995). And the perceived benefit online is defined as a concept that can provide consumers with financial savings, search time savings, rapid service provision, efficiency of decision making, and convenience(Je Min-ji, Kim Yeong-kuk, 2011). The perceived benefit is explained in terms of benefit and value. Song Heung-kyu(2014) explained the perceived benefit by dividing it into three categories as the evaluation of subjective perception of the product that provides good benefit compared to price and the overall benefit provided by product. Sweeny & Soutar(2001) divided it into economic benefit, non-economic benefit, emotional benefit and social benefit.

As the consumers' perceived benefit based on the characteristics of online information can be quickly accessed from anywhere, and their direct experience review is enough to increase confidence in purchase decision making and will have a positive influence on the their perceived benefit, the benefit in terms of economy, convenience, saving and information is measured by reflecting in the restaurant customers' perceived benefit of WOM information(Salo & Karjaluoto, 2007).

# 2.4. Perceived Risk and WOM Effect

WOM information can positively or negatively shape or reinforce the user's attitude toward the company or product, and further affect the purchase behavior(Lim Sung-taek, Jo Won-seop, 2011). The measurement of WOM effect has been applied to customer's attitude change, purchase intention, actual purchase, WOM intention and WOM information re-delivery(Kim Chang-ho, Hwang Ui-rok, 1999).

In a number of previous studies, the higher consumer's perceived risk to information providers may result in activities that they do not accept e-WOM or actively spread negative e-WOM(Assael, 2004; Kim, 2010).

The perceived risk of eating out is especially considered to be a very important factor, and consumers tend to have a higher perception of uncertainty about the outcomes of information providers when eating out is attended with the potential perceived risk(Frewer et al., 1998; Yeung & Morriss, 2001; Yeung & Yee, 2003, Kim et al., 2008). As a result, the greater anxiety about specific foods with the high perceived risk can have a negative influence on purchase intention. The measurement of such WOM effect is divided into the acceptance of WOM information and the WOM activity. The effect indicators such as consumers' brand attitude, purchase intention and purchase can be seen as the acceptance of WOM information, and the effect indicators such as their WOM intention, re-delivery and recommendation can be seen as the WOM activity. Therefore, the WOM effect in this section is measured as the spread of WOM in the restaurant industry.

## 3. Research Design

# 3.1. Research Model and Hypothesis Setting

## 3.1.1. Research Model

This study is intended to look into the factors influencing intention to use restaurant information and verify the relationship between them. The restaurant information is expressed as the satisfaction and interaction of the desire through the online community, but the negative WOM information has a greater influence on the attitude change or the WOM effect according to the information direction. Therefore, in this study, the research model was schematized as follows to look into the influence of WOM information characteristics used in a number of previous studies related to eating out among e-WOM information characteristics on WOM effect through the perceived risk and benefit as restaurant consumers send and receive the restaurant information on the basis of their experience and knowledge through the Internet.



#### **3.1.2.** Hypothesis Setting

The restaurant brand has a huge influence on the e-WOM because it leads to the effect through the emotional perceived benefit rather than other fields in recipient's and sender's community for the e-WOM. This means that the more customers accept the perceived benefit from online information, the more they are likely to accept e-WOM in cyberspace(Je Min-ji, Kim Yeong-kuk, 2011). Kaye(2007) said that the perceived benefit through blogs are likely to lead to e-WOM, which is interactive communication through comments, with users' voluntary participation. Kim et al.(2008) said that the perceived benefit of hotel blogs has a positive influence on the attitude, and the attitude has a positive influence on e-WOM. Seo Hyun-jin and Lee Kyu-hye(2013) also said that the more benefits perceived by consumers have a high influence on product attitude and maximize the effect of WOM information. In addition, Song Heung-kyu(2014) said that the more perceived benefits of famous restaurant blogs increase e-WOM, and Son Heung-kyu(2015) said that the restaurant consumer's perceived benefit has a positive influence on the visit intention. Therefore, it can be deduced that the more perceived acceptance and benefit through the restaurant Internet media will increase the WOM effect. Based on these previous studies, the hypotheses were set as follows.

**Hypothesis 1:** The e-WOM information sender characteristics will have a positive influence on the product risk perception.

**Hypothesis 2:** The e-WOM information recipient characteristics will have a positive influence on the product risk perception.

**Hypothesis 3:** The e-WOM information communication characteristics will have a positive influence on the product risk perception.

Hypothesis 4: The e-WOM perception risk will have a positive influence on the WOM acceptance.

Hypothesis 5: The e-WOM perception risk will have a positive influence on the WOM spread.

#### 3.2. Operational Definition of Measurement Variables and Questionnaire Configuration

Since each researcher may differently interpretate the variables used in the hypothesis of this study, each variable is operationally defined as follows for the purpose of this study. The questionnaire was composed of a Likert 5-point scale. 5 points were 'very agree', which means that it is positive for the item and 1 point was 'not at all', which means that it is very negative for the item.

# 3.2.1. E-WOM Information Characteristic Factors

#### **3.2.1.1. WOM Sender Characteristics**

The existing WOM communication research showed that the receiver tends to perceive and judge the expertise of information source according to the message sender's age, gender, education level, experience, social status, knowledge and insight. And it showed that the WOM effect depends on the recipient's high perception of homogeneity with information provider. Therefore, the sender's characteristics were composed of 5 items based on the study of File & Cermak(1994) from the recipient's perspective.

## 3.2.1.2. WOM Recipient Characteristics

In the online communication research, recipient's characteristics increase the restaurant consumer's WOM effect because they can leave the recheck text of the recipient who uses the sender's information through the visualized community(Newman 2003).

The WOM community members can meet their needs for senders' information through the WOM community, but in this process, recipients identifies themselves with the community from a psychological perspective, and shares the values, norms and goals of the community from a cultural perspective, trusting the community in the same sense of unity(Peterson, 1995).

The recipient's e-WOM community is a group formed around joint concerns and interests. The high agreement of recipients' interest and the high agreement of their interest and community's interest will increase the their reliability of the community. Therefore, the recipient's characteristics was composed of 5 items by applying the research results of Lim Jong-won and Lee Eun-young(2007) as recipient factors for measuring interaction with community based on the above discussion.

#### 3.2.1.3. Online Communication

The online communication was composed of three areas such as WOM information sender's characteristics, WOM information recipient's characteristics and community interaction. First, the WOM information sender's characteristics were defined as "the demographic characteristics of each sender, the expertise, opinion leadership, bond strength and homogeneity of the sender, and the quality of the service provider", and they were composed for online situations based on the research of Lederer et al.(2001). The WOM information recipient's characteristics were defined as "the demographic characteristics of each recipient, and the expertise, involvement, decision making risk and pre-expectation of the recipient", and they were composed for online situations based on the research of Lederer et al.(2001). And the community interaction were defined as "the perception of active opinion exchange between members for communication", and it was composed of a total of 5 items based on the research of Lee Eunyoung and Lee Tae-min(2005).

#### 3.2.2. WOM Risk Perception

In this study, the perceived risk was defined as the perception of uncertainty and loss perceived by consumers from online restaurant information, and the measurement variables were composed of a total of 5 items to identify risk factors for consumption environment in restaurant based on the researches of Salo & Karjaluoto(2007), Kim et al.(2008), Je Min ji and Kim Yeong-kuk(2011), and Song Heung-kyu(2014).

# 3.2.3. WOM Effect

The e-WOM effect means the WOM in the virtual space of the Internet(Lee Eun-young, Lee Tae-min, 2005). It was also seen as attitude, purchase intention and re-delivery(Kim Chang-ho, Hwang Ui-rok, 1997). Lee Jin-hee, Do Sun-jae and Hwang Jang-sun(2011) viewed it as WOM acceptance and spread. Therefore, the WOM effect factors were composed of 5 items of WOM acceptance and 5items of WOM spread based on the research of Lee Jin-hee, Do Sun-jae and Hwang Jang-sun(2011). And the evaluation was measured on a Likert 5-point scale(1: not at all, 3: normal, 5: very agree).

The questionnaire configuration details based on the above contents were schematized as follows.

Variable			Number	Item Number	Scale	Source
Demogra	Demographic Factor		1-4	4	Nominal Scale	
Restaurant U Exp	se Frequency and enditure	Restaurant Use Frequency, Expenditure Cost	1-2	2	Nominal Scale	Lee Eun-young, Lee Tae-min(2005) Lim Jong-won, Lee
In	ternet	Consumption Time, Reason, Information Acquisition	1-3	3	Nominal Scale	Eun-young(2007)
		WOM Information Sender Characteristics	1-5			File &
Independent Variable	WOM Information Characteristics	WOM Information Recipient Characteristics	1-5	15	Likert 5- Point Scale	Cermak(1994) Newman(2003) Lederer Al et al.(2001)
		Online Communication Characteristics	1-5			Lee Tae-min(2003)
Moderating Variable	Product Risk Perception	Risk Perception	1-5	10	Likert 5-Point	Salo & Karjaluoto (2007)

Table 1: Questionnaire Configuration Details

					Scale	Song Heung-
	Due he et					kyu(2014)
	Product	Perception Benefit	1-5			Johson &
	Perception Benefit					Kaye(2004)
						Kaye(2007)
Donondont		WOM Acceptance	1-5		Likert	Lee Jin-hee, Do Sun-
Variable	WOM Effect			10	5-Point	rae, Hwang Jang-
variable		WOM Spread	1-5		Scale	sun(2011)
Total						

# 3.3. Survey Target and Analysis Method

## 3.3.1. Survey Target

The survey targets in this study were a total of 500 restaurant customers in their 20s to 60s in Seoul who have experience using restaurant companies and can use the Internet by each household. The population was divided into meaningful subgroups in the light of meaningless statistical comparisons due to random sampling in probabilistic sampling. A total of 426 restaurant customers except missing values were sampled by using stratified sampling, which randomly samples a fixed number of subgroups. A survey was carried out to them for a total of 15 days through February 1 to February 15, 2017.

#### 3.3.2. Analysis Method

The statistical program was used to analyze the collected data. As the main analysis methods of data, first, factor analysis was conducted to verify the measurement tools, and Cronbach's coefficient  $\alpha$  was calculated for reliability verification. Second, the correlation analysis was conducted to examine the correlation between variables. Third, for the verification of each hypothesis, the structural equation statistical package LISREL 8.8 version was conducted.

#### 4. Research Result

## 4.1. Characteristics of Sample

The frequency analysis was conducted to identify the characteristics of sample. The main results are shown in <Table 2> below. First, 228 women responded, accounting for 53.5% of the total. For age, 31.5% of the total were in their 30s, followed by 29.1%(124 persons) in their 40s, 23.7%(101 persons) in their 20s. 59.2%(252 persons) were married and 40.8%(174 persons) were unmarried, which the married was more than the unmarried.

Ch	aracteristic	Ν	%	Characteristic		Ν	%
Gender	Male	198	46.5	Education Level	Less High School Education	36	8.5

Table 2: Demographic Characteristics of Respondent

					Junior College Education	54	12.7
	Female	228	53.5		4-Year College Education	279	65.5
	20s	101	23.7		Graduate School Education	57	13.4
	30s	134	31.5		Professional	35	8.2
Age	40s	124	29.1				
	50s	58	13.6		Service	13	3.1
	Over 60s	9	2.1				
	Less Than 1 Million Won	20	4.7	Occupation	Office	241	56.6
			Self-Employed	45	10.6		
	1 Million Won to 2 Million Won	59	13.8		Student	29	6.8
Monthly					Housewife	51	12.0
Income	2 Million Won to 3 Million Won	13.3	31.2		Other	12	2.8
	3 Million Won to 4 Million Won	87	20.4	Marital Status	Unmarried Married	174 252	40.8 59.2
	More Than 4 Million Won	127	29.8	-	Total(N)	426	100

## 4.2. Validity and Reliability of Measurement Tool

The validity and reliability of measuring indicators used in this study were analyzed to determine whether they were the correct measurement tools to measure the concepts needed for hypothesis verification and whether they were accurately understanding the concepts this study tries to measure. For reliability review, the factor analysis was conducted about 7 constructs and 35 items. The results of the analysis on reliability and validity are as follows. The concentration validity can be recognized at a significance level of 0.001 when the factor loadings is above 0.6 and the t-value is above 3.29. The factor loadings of the presented indicator variables were between 0.651 and 0.935, and the t-values were also between 8.691 and 25.173, having the concentration validity. The judgement validity can be recognized when the correlation square between two concepts is lower than the variance extraction coefficient of each concept. The variance extraction coefficient factor was 0.510 to 0.762, which is higher than the usual standard value of 0.5, and which is generally higher than the correlation square between concepts. In the reliability evaluation,

the minimum and maximum Cronbach's alpha values of each indicator variable were 0.815 to 0.913, which is higher than the usual standard value of 0.6, having reliability.

Configuration	Indicator	Factor Loadings	t-value	Correlation Square	a*	C.R**	Variance Extraction Coefficient
	Question1	0.671	9.163	0.548			
WOM Information	Question2	0.769	11.258	0.631			
Sender	Question3	0.751	9.842	0.564	0.815	0.823	0.510
Characteristics	Question4	0.724	9.838	0.524			
	Question5	0.641	8.691	0.411			
	Question1	0.719	10.073	0.517			
WOM Information	Question2	0.738	9.359	0.545			
Recipient	Question3	0.683	8.894	0.566	0.833	0.835	0.537
Characteristics	Question4	0.719	10.069	0.517			
	Question5	0.684	9.554	0.618			
	Question1	0.708	10.616	0.501			
Online Communication	Question2	0.726	10.945	0.527	0.527		
	Question3	0.792	12.214	0.627	0.867	0.870	0.573
	Question4	0.801	11.215	0.642			
	Question5	0.753	9.947	0.567			
	Question1	0.935	19.289	0.885			
	Question2	0.824	16.088	0.679			
Product Perception	Question3	0.702	12.509	0.593	0.887	0.892	0.597
RISK	Question4	0.753	14.202	0.567			
	Question5	0.651	10.218	0.362			
	Question1	0.922	12.125	0.850			
	Question2	0.901	21.037	0.812			
Product Perception Bonofit	Question3	0.806	16.095	0.650	0.901	0.911	0.762
Benefit	Question4	0.841	17.684	0.707			
	Question5	0.883	15.524	0.751			
WOMA	Question1	0.807	19.726	0.651	0.005	0.008	0.711
w Uw Acceptance	Question2	0.911	25.173	0.830	0.905	0.908	0./11

Table 3: Analysis Result of Reliability and Validity

	Question3	0.790	19.957	0.624			
	Question4	0.860	24.698	0.740			
	Question5	0.822	21.772	0.581			
	Question1	0.895	20.211	0.801			
	Question2	0.793	15.401	0.629			
WOM Spread	Question3	0.908	19.470	0.824	0.913	0.906	0.684
	Question4	0.693	12.125	0.580			
	Question5	0.782	16.821	0.715			

# 4.3. Verification of Hypothesis

# 4.3.1. Relationship between Variables

The results of correlation analysis conducted to examine the correlation between variables are shown in <Table 4> below. Analysis showed that the correlations between variables, i.e. between independent variables, between independent variables and dependent variables, and between dependent variables were statistically significant positive(p<.001). Therefore, the analysis for full-scale hypothesis verification was conducted.

Classification	(1)	(2)	(3)	(4)	(5)	(6)	(7)
WOM Information Sender Characteristics	1						
WOM Information	.537**	1					
<b>Recipient Characteristics</b>	.000	1					
Online Communication	.461** .000	.517** .000	1				
Product Perception Risk	.273** .000	.389** .000	.550** .000	1			
Product Perception Benefit	.380** .000	.463** .000	.551** .000	.642** .000	1		
WOM Acceptance	.343** .000	.283** .000	.362** .000	.312** .000	.527** .000	1	
WOM Spread	.294 .000	.457** .000	.583** .000	.592** .000	.688** .000	.425** .000	1

<b>Table 4:</b> Result of Relationship between Variables
--

\*\* P < 0.01, \* P < 0.05

# 4.3.2. Hypothesis Verification

To achieve the purpose of this study, the hypothesis was verified through a research model. For the hypothesis verification, path analysis was conducted through LISREL, a statistical package of structural equation. The use of latent variables in path analysis can well explain the relationship between measures and latent variables, but the use of the same cumulative scales in the mean or total can not take into account variations between measures on the same concept. Therefore, the covariance structure equation was used to obtain path coefficients and determine whether the research hypothesis was supported according to the statistical significance.

The path analysis on the research model was conducted based on the correlation coefficient matrix of the items with reliability and validity. The results are as follows.

The results of hypothesis verification for the correlation between e-WOM(WOM information sender characteristics, WOM information recipient characteristics, online communication), e-WOM risk(perception risk, perception benefit), and e-WOM effect(WOM acceptance, WOM spread) are shown in <Table 5> below.

The path and statistics of  $\langle \text{Table } 5 \rangle$ , which simultaneously analyzed the relationship between value attribute variables related to e-WOM, and risk perception, perception benefit, WOM acceptance and WOM spread, showed that WOM information sender characteristics had a significant positive influence on the WOM effect at the significance level(path coefficient 0.136, t value 1.850). The WOM information recipient characteristics and online communication were also significant at the significance level of 0.1%, indicating that these variables had a significant positive influence on the WOM effect. In other words, all research hypotheses are supported.

In the relationship between e-WOM risk and e-WOM effect, the influence of WOM risk perception on WOM acceptance showed that the standardized path value was 0.926, and the t value was 37.804, supporting the research hypothesis at the significance level of 0.1%. In other words, the WOM risk benefit had a positive influence on the WOM acceptance.

The influence of WOM benefit on WOM spread showed that the standardized path value was 0.942, and the t value was 17.792, supporting the research hypothesis at the significance level of 0.1%.

Нуро	thesis	Path	Estimates	t-value			
	H1	WOM Information Sender Characteristics $\rightarrow$ WOM Effect	0.136	1.850*			
1	H2	WOM Information Recipient Characteristics → WOM Effect	0.326	4.025***			
	Н3	Online Communication → WOM Effect	0.331	4.394***			
r	H1	WOM Effect $\rightarrow$ WOM Acceptance	0.926	37.804***			
2	H2	WOM Effect $\rightarrow$ WOM Spread	0.942	17.792***			

Table 5: Path Analysis Result(Hypothesis Verification)

#### 5. Conclusion

This study was intended to look into the influence of e-WOM on management performance in the restaurant industry and examine whether the e-WOM depends on the WOM effect. The findings are summarized as follows.

First, the influence of e-WOM on product risk perception showed that WOM information sender characteristics, WOM information recipient characteristics and online community had a statistically significant positive influence on product risk perception. Second, the influence of e-WOM on product risk benefit showed that WOM information sender characteristics, WOM information recipient characteristics and online communication had a statistically significant positive influence on product risk benefit.

Third, WOM risk perception had a statistically significant positive influence on WOM acceptance.

Fourth, WOM risk benefit had a statistically significant positive influence on WOM effect.

As for the above-mentioned findings, the communication between e-WOM sender and recipient had a positive influence on the product evaluation and attitude change in the restaurant industry, and the WOM effect had an influence on the financial performance and non-financial performance. The communication attaches importance to a direct using and tasting experience due to the nature of restaurant industry when it is simultaneously performed as a positive mechanism between sender and recipient through each channel of these factors. But the e-WOM culture can leads to the WOM effect when both sender and recipient share the persuasive communicability in reality that diversifies communication methods, having a positive influence on the management performance.

Overall, restaurant consumers consider the contents of WOM information to be important when making the final purchase decision.

In particular, as the restaurant industry is pouring out various menus due to the development of technology, it needs to actively seek ways to improve the WOM effect for increasing the rate of existing customers' revisit purchase. To do so, it needs to form and maintain ongoing relationships with existing customers through customer database management. If new customers are acquired by recommendation from existing customers, giving incentives such as presenting free gifts or repurchase discount coupons will be also an effective means of creating positive WOM and new customers.

Finally, this study has its limitations in that it limits the effect of e-WOM on the framework of restaurant, and fails to incorporate more diverse and appropriate e-WOM theories.

Therefore, further research will have to study the theory to supplement and develop these limitations and incorporate them into other genres.

In addition, as SNS is expanding as a venue of communication for information sharing among consumers due to social and cultural phenomena, this study needs to go through many SNS users as a sample of research to look into how any factors affect their purchase intention and e-WOM. The consumer attitudes toward restaurant products can be affected by the composition and characteristics of the menu, depending on gender, age, and occupation. Consequently, If further research concentrates on one item to conduct a comparative study according to demographic characteristics, it will be in-dept study.

# References

Assael, H. (2004). Consumer behavior-a strategic approach boston. Houghton Mifflin Co.

- Barbara, B., & Schindler, R. M. (2001). Internet forums as influential sources of consumer information, *Journal of Interactive Marketing*, 15(3), 31-40.
- Bauer, R. A. (1960). Consumer behavior as risk taking, in dynamic marketing for a changing world by hancook. R.S.(ed) chicago, *American marketing Association*, 389-398.
- Bickart, B., & Schindler, R. M. (2001). Internet forums as influential sources of consumer information. *Journal of Interact Mark*, 15(3),31-40.
- Chatterjee, P. (2001). Online review: Do consumers use them. Adv Consum Res, 28,129-133.
- Cermak, D, S. P., & File, K. M. (1994). Customer participation in service specification and delivery. *Journal of Applied Business Research*, 10(2),1-12.
- Dawling, G. R. (1999). Perceived risk in the elgar companion to consumer research & economic psychology, P.E. Earl & S.Kemp(Eds), Cheltenham, UK, Edward Elgar, 419-454.
- Elliott, K. M. (2002). Understanding consumer-to-consumer influence on the web. Doctoral Dissertation, Duke University.

- Frewer, L. J., Howard, C., Hedderley, D., & Shepherd, R. (1998), Mehgodological approaches to assessing risk perceptions associated with food-related hazards, *Risk Analysis*, *18*(1), 95-102.
- Jang, S. O., & Lee, Y. J. (2009). A Study of Residents' Recognition and Tourism Merchandising Intention of Native Local Foods in Yeongcheon Region, *Korean Journal of Food and Cookery Science*, 25(4), 452-466.
- Je, M. J., & Kim, Y. K (2011). Research Articles: The relationships of bloggers' trust, perceived risk, benefit and intention to purchase in restaurants, *Korean Journal of Foodservice Management Society*, 14(3), 157-174.
- Jung, K. H., Jung, H. & Shin, J. I. (2010). The Effects of SNS(Social Networking Service) Activities on Brand, WOM and Purchase Intention in the Foodservice Industry, *Korea Business Review*, 2010(8), 1-8.
- Kaye, B. K. (2007). Web site story, an exploratory study of blog use motibations. In m. Tremayne(Ed.), *Blogging*. *Citizenship*, & the Future of Media(127-148). New York, Routledge.
- Kim. D. J., Ferrin, D. L. & Rao, H. R.(2008). A trust-based consumer decision-making model in electronec commerce, The role of trust, perceived risk. & their antecedents. Decision support systems, 44(2), 544-564.
- Kim, K.Y. & Heo, Y. W. (2011). The Effect of Transmit-Receive Communication Interaction of Food Service Consumer's Word-of-Mouth Information on Acceptability and Word-of-Mouth Effects, *Journal of Industry Economy Research*, 24(2), 991-1025.
- Kim, K. J. & Sung, T. J., & Lee, W. K. (2011). The Comparative Study on the Influence of Easiness to Use Smart Phone Application based on the Experience of Searching Restaurant Information on Value and Satisfaction, *Journal of Restaurant Management Research*, 14(5), 113-131.
- Kim, J. W., Park, H. C., & Lee J. S. (2007). Information Production Motivation and Type of Electronic WOM Source. *Journal of Korean Psychological Association*, 2007(1), 566-567.
- Kim, C. H., & Hwang, U. R. (1999). On the Ethnography of Symbiotic Marketing form the view of Coupon Managers. *Marketing Research*, 14(3), 97-117.
- Kim, S. S. A.(2010). Study of relationship of transactional performance with online community characteristics, benefits & relationship reinforcement in food service brand, Diss, Doctoral Dissertation Kyonggi University.
- Lederer, A. L., Mirchandani, D. A., & Sims, K. (2001). The Search for Strategic Advantage from the World Wide Web. Int J Electron Comm 5(4), 117-133.
- Lee, E. Y., & Lee, T. M. (2005). The Effects of Information Characteristics on Word of Mouth Performance in Online Environment : Focused on the Moderating Effect of Consumer Knowledge. *The Korean Journal Of Advertising*, 16(2), 145-171.
- Lee, J. H., Do, S., & Hwang, J. S. (2011). Effectiveness of online WOM(Words-of-Mouth). Journal of Korean Psychological Association, 12(2), 283-307.
- Lim, S. T., & Jo, W. S. (2011). The Effects of Business Blog Information Characteristics Influencing on lectronic Word-of-Mouth In the Food Service Industry, *Korean Journal of Hotel Administration*, 20(5), 165-180.
- Lim, J. W., & Lee, E. Y. (2007). A Study of the Factors Influencing WOM Effects in Online Environments. Asia Marketing Journal, 8(4), 59-77.
- Nam, J. H., Kim, Y. I., & Hyun Y. H (2013). A Study on Building Trust of Social Commerce by Food Product Consumers. *Journal of Restaurant Management Research*, 16(5), 147-170.
- Newman, P. J. (2003). An Investigation of Consumer Reactions to Negative Word-of-Mouth on the Internet. Doctoral Dissertation, University of Illinois.
- Park, S. W. (2011). A Study of the Influence of Online Word-of-Mouth on the Customer Purchase Intention: Moderating Effect of Involvement, Regulatory Focus and Self-Efficacy, Inha University Graduate School Doctoral Thesis.

- Park, J. Y. (2015). The Effects of the Characteristics of Word of Mouth Information Communicated through SNS's on Word of Mouth Effects - Focusing on Moderating Effect of Restaurant Image. *Journal of Tourism Services Research*, 13(1), 107-121.
- Park, C. Y., & Chang. J. (2006). Study on the Effects of Consumers' Word of Mouth about Brand Experiences and Responses on Brand Evaluations at Online Context, *Journal of Consumer Studies*, 17(1), 73-93.
- Peterson, R. A.(1995). Relationship marketing & the consumer, *Journal of the Academy of Marketing Science*, 23(4), 278-281.
- Salo, J., & Karjaluoto, H. (2007). Mobile games as an advertising medium, towards a new research agenda, *The International Research Journal Innovative Marketing*, 3(1), 72-83.
- Schiffman, L.G., & Kanuk, L. L.(2000). Cunsumer behaviour(7th edition). Newjersey: Prentice hall international.
- Seo, H. J., & Lee K. H. (2013). Effects of direction and evaluative contents of online reviews on consumer attitudes toward clothing products. *Journal of Information Culture Research*, 21(3), 440-451.
- Song, H. K. (2014). A Study of Relationship of Gourmet Blog's Reliability with the Perceived benefits, Perceived Risk and Online Word of Mouth of Eating out Consumer. *Korean Journal of Culinary Research*, 20(6), 275-291.
- Sung, Y. S., Yoo, H. R., & Jang I. S. (2001). A Study on Consumer WOM Information Word of Mouse, *Journal of Advertising and Promotion Research*, *1*, 1-3.
- Smith, D.(2002). Trust me, would I steer you wrong? the enfluence of peer recommendations within vitual communities, Ph.D. dissertation, University of Illinois.
- Sweeney, J. C., Soutar, G. N., & Johnson. L. W.(1999). The role of perceived risk in the quality value relationship. a study in a retail environment, *Journal of Retailing*, 75(1), 77-105.
- Yeung, R. M. W., & Moriss, J. (2001). Food safety risk consumer perception & purchase behaviour. *British Food Journal*, 103(3), 170-186.
- Yeung, R. M., & Yee, W. M. S. (2003). Risk reduction, an insight from the UK poultry industry, *Nutrition & Food Science*, 33(5), 219-229.