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# A Factors Effecting Online Social Decisions in Online Consumer Behavior\*

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## Abstract

**Purpose:** Consumers are affected by the purchase of a large number of opinions or support during the online purchasing process. This can be defined as the term of ‘social decisions’ on line. This paper seeks to explore the factors of influence on social decisions in on-line environment and to study in depth. **Methodology:** The purpose of this paper is to empirically examine the impact of factors on online social decisions. To verify the hypothesis of study, This study collected 256 from Seoul City, Gyeonggi Province and Chungcheong Province through Survey. **Results:** According to the research results, First, eWOM information usefulness have a positive impact on online social decisions, Second, online network connectedness have a positive impact on online social decisions. Third, innovative product have a positive impact on online social decisions. and the lower the category of knowledge, the more inclined it is to make online social decisions. Finally, social decisions have a positive impact on purchasing decisions about product. It is most significant that academic research has advanced consumer behavior in response to recent changes in the consumption environment. It is meaningful that we have studied in depth the changing consumer decision process in online channel environment.

**Keywords:** Category Knowledge, eWOM Information Usefulness, Innovative Product, Online Consumer Behavior, Online Social Decisions, Network Connectedness.

**JEL Classification Code :** D12, M31, M39.

## 1. Introduction

With increased mobility and connectivity, customers already have limited time to consider and evaluate brands. As the pace of life accelerates and their attention span drops, customers experience difficulty in focusing (Kotler, Kartajaya, & Iwan, 2016). Consumers are shopping by easily clicking on online information. Moreover, the consumer market is changing remarkably as mobile functions improve. Moreover, the level of information provided and received in cyberspace is drastically changing. Beyond diversification of marketing communication channels, it is changing the decision-making structure of consumers (Han 2018; Jaakko, Hannu,

Mark & Mika, 2017). Comparison during online shopping is very popular activity for smart customers (Chung, 2017).

Moreover, the rapid spreading of social media users such as Facebook and Instagram makes it possible to share information and experience information among consumers anytime, anywhere through social network services. This rapid spreading of SNS users enables the production, exchange, and distribution of brand-related information among consumers and, consequently, the status of consumers in the relationship between consumers and businesses is transforming into active ones rather than passive ones (Bryant et al., 2006).

Thus, word-of-mouth(WOM) in these digital environments is becoming more influential. The growing influence of the old system in consumer decision-making is attributable to the reliability of the old message. Consumers tend to trust online oral information because it tends to recognize that the older information provided by other consumers is more truthful than the commercial information provided by businesses (Sen & Lerman, 2007). In addition, consumers share their own experiences in using products or services through various channels, and due to

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the prevalence of old information and the link between product reputation, oral information is important not only to consumers but also to businesses.

In light of the tendency to trust online oral information more, consumers are more interested in the opinions of many others by utilizing accessibility. The Internet, especially social media, has come as many people share their opinions and have a profound impact on their purchasing decisions. Kotler et al. (2016) described in their book that in the pre-connectivity era, an individual customer determined his or her own attitude toward a brand. In the connectivity era, the initial appeal of a brand is influenced by the community surrounding the customer to determine the final attitude. Many seemingly personal decisions are essentially social decisions. The new customer path should reflect the rise of such a social influence. When it comes to understanding brands, consumers now actively connect with one another, building ask-and-ask-and-advocate relationship. They have very active connections in customer forums. Marketers can efficiently collect and analyze consumer review data to get insights of valence, volume, and growth pattern of eWOM(Oh, 2017).

In today's smart environment and highly connected consumption environment, consumers' attitudes toward new products or brands and their decision to buy will be significantly different from that in the past. Therefore, the purpose of this study is to identify the factors that influence social decisions rather than their own opinions or attitudes in purchasing brands on line. This study aims to address this research question 'What factors influence online social decisions? Today, many people will participate in online reviews and share opinions in the process of mutual communication, exchange and reproduction. The study explores in depth the factors that affect social decisions making involving many people online

## 2. Literature Review & Development of Hypothesis

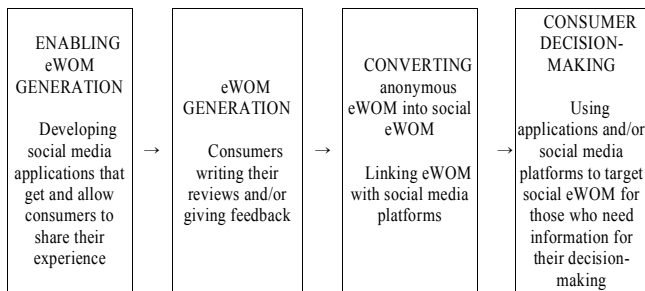
### 2.1. eWOM

Online review is a source of reliable information, with consumers freely leaving their spending periods on online sites. And this is called an Electronic word-of-mouth (Litvin, Goldsmith, & Pan, 2008). There are limitations of the space and limitations of human networks that are conducted through face-to-face contact within a group of individuals. However, due to the development of online technology and the universalization of mobile digital devices, it is possible to obtain oral information from many

through non-face contact in virtual space (Terry & Ernest, 2014). In particular, online review sites have a huge impact on eWOM(Electronic word-of-mouth) by providing real-time information to other consumers about the product they have experienced(Awad & Ragowsky, 2008).

In existing WOM studies, WOMs are cognitively and behavioral related to the acceptance of receivers, and only take into account positive aspects, such as WOM diffusion, preference, etc. as a response after the acceptance of recipients, and the actual WOM structure and process are the characteristics of WOM stimuli, the attitudes toward WOMs, and the resulting reactions of receivers (Cheung & Thadani, 2012). With the activation of social media, it is turning into open, accessible to everyone, and an information-type network has become stronger for everyone to relate, produce and share information. Also, the production, active proliferation and sharing of information, and the participation of these generated information change attitudes (Godes, David, & Dina Mayzlin, 2004). Now, many people are digitally connected to share their daily lives, interests and opinions. They share thoughts on which products they use and which brands they like. In a hyper-connected smart environment, consumers can make good information acquisition and better purchasing decisions by accessing public wisdom. eWOM is becoming more magnanimative, more social (Tan, 2017). On the other hand, the eWOM characteristics are found to be highly spread, non-linear, and social ties, and the acceptance of WOM information is enhanced by quality, interestingness, etc. And as the acceptance level of WOM increases, the intention of resending is revealed in study. In particular, the quality factor (good, up-to-date, correct information) of WOM information is presented in the highest acceptance level of WOM (Huang, Cai, Alex, & Zhou, 2011). In the service business environment, eWOM information is becoming more important as a critical factor in consumer choice of purchase (Jillian, Geoffrey, & Soutar, 2008). Unlike offline-WOMs, the characteristics of the online-WOMs are virtual interaction and virtual social relationships (Huang et al., 2011).

Information provided unilaterally by existing companies can be found online by consumers themselves, shared and exchanged, and multi-faceted inter-consumer communication has a far greater impact on consumers than offline because it is easy to store information (Sisors & Bumba, 1995; Baty & Le, 1995). As the amount of WOM information of the product or service online, consumers are also evolving to explore information. Consumers view an unspecified number of online reviews as WOMs through communities such as blogs, cafes, e-mails, newsgroups, chat rooms, etc. online and use them as a useful clue to the purchasing decision-making process (Cheng & Thadani, 2012).



Source : Jaakko et al. (2017)

**Figure 1:** Converting anonymous eWOM into social eWOM

It is changing from an anonymous online WOM to a social eWOM. It is changing from anonymous eWOM to a social eWOM. And social eWOMs are more reliable than they used to be, easier to evaluate themselves, and are becoming an interpersonal relationship while sharing information with each other, eWOM gives marketers the implication of social influence that creates value and plays the role of online (Jaakko et al., 2017). A study is presented that users fully agree and comply with the WOM information online (Cannoy & Salam, 2012) <Figure 1> shows that anonymous eWOMs are converting into aspects of social eWOMs.

## 2.2. Social Support & Social Decisions

Social support is all the positive resources a person can get from his interpersonal relationships, it is a sense of respect that leads to the belief that one is receiving regard and love, and a network of relationships that is attached to and communicates with each other (Cohen & Hoberman, 1983). In other words, the resources available in interpersonal relationships are social support, and humans are essentially people with a desire to receive social support. People meet it through meaningful interactions with other people. Online social support can be discussed in a situation in which non-interface communication through online media can be freely exchanged. Online social support is all the support the reviewer receives from the brand community as a result of its positive interactions with other members who have ties to it. The level of social support is known to be one of the most important factors in determining whether consumers will conform to social norms. The level of social support can be defined as the proportion of those who support attitudes or actions against any object in the group. Therefore, when the level of social support is high, consumers' compliance with certain attitudes or actions increases (Goldstein, Cialdini, & Griskevicius, 2008). This is because consumers judge the opinions agreed upon by many to be relatively accurate. And consumers are passive

in accepting a minority opinion because they judge it to be inaccurate and consider the minority to be an immaterial group. More interaction, communication, and sharing opportunities with others contribute to building and developing social relationships. Relational capital means a sense of belonging with others, and also an emotional identification of social relational capital in online communication. The study noted that this emotional identification could lead to loyalty and purchasing behavior for certain brands (Chiu, Hsu, & Wang, 2006). In an offline-focused society, individual customers form their attitude toward the brand themselves. However, in an online smart environment, information searching and attitude formation processes for products or brands are affected by reviews and communities surrounding customers. In the pre-connectivity era, an individual customer determined his or her own attitude toward a brand. In the connectivity era, the initial appeal of a brand is influenced by the community surrounding the customer to determine the final attitude. Many seemingly personal decisions are essentially social decisions. The new customer path should reflect the rise of such social influence. Consumers actively connect with each other to ask and share with each other and understand products or brands and attitudes are formed (Kotler et al., 2016).

## 2.3. eWOM Usefulness

Shopping activities usually occur when consumers feel a sense of pleasure or pleasure other than meeting the needs, and the recognition and the use of information by the online sources of pleasure or diversion facilitates the purchase of products or services. In general, in consumer behavior studies, the pleasant stimuli of the information media help create positive and favorable attitudes for consumers (Van Der Heijden, 2003). Information usefulness is the basis for determining the information value of the media (Lee & Na, 2016). The purpose of the consumer's information search is to have multiple factors as well as relevant information in the purchase on line. So, in word-of-mouth communication process, consumers set standards for determining the usefulness of information that suits their purpose. Therefore, perceived usefulness through online information sources contributes to consumers' decision-making processes and speed, and perceived usefulness of information represent consumer confidence and a belief in information effectiveness (Davis, 1989).

Meanwhile, the Technology Acceptance Model (TAM) defined the usefulness of WOM information as 'the degree to which the use of information provided by other consumers forms the belief that it will help determine purchasing decisions (Davis, 1989). Information usefulness

is the information that evaluates to be relatively useful and valuable in determining receiver's purchase decision based on the numerous information available online. And the usefulness of online information has a positive impact on online information acceptance, attitude and intent to use it (Cheung & Thadani, 2012). Davis (1989) suggested, Information usefulness is the building of the belief that consumers will use specific information to help make their purchasing decisions, and to the extent that it has a positive impact by choosing online information. When the consumer determines whether a large amount of information is useful or not, the highly useful information is that the information provided from online is relatively useful and valuable in determining one's purchasing decisions (Lee & Na, 2016). A prior study of information usefulness suggests that higher information usefulness has a positive effect on the acceptance and diffusion of word-of-mouth, the perceived usefulness of information will have a higher level of confidence in the eWOM source, and consumers will respond positively to the opinions and support of the majority. Thus, a hypothesis was derived that:

**H1:** The eWOM usefulness will have a more positive impact on online social decisions, in consumer behavior online.

#### 2.4. Online Network Connectedness

In a study involving offline communication, social ties were discussed as a factor that could influence consumer decision making by communicating among individuals and groups (Brown & Reingen, 1987). Social ties are the formation and sharing of information as a result of the exchange process or information process (Deighton & Grayson (1995). The consumer will make an effort to eliminate uncertainty in the buying situation, which can be resolved through the process of acquiring information (Steffes & Burgee, 2009). If social ties are strong, there is an active search for information between the individual and the individual (Bone, 1992), Information obtained from people with high social ties has more influence than from people with low social ties. In particular, individuals and individuals who use tangible products or services that express social relationships, share information and communicate with each other, may change their attitudes and images to the brand due to the strength of social ties (Chu & Kim, 2011).

Online ties can not be formed as strong as offline ones, but online social ties themselves suggest a significant impact on sharing and diffusion (Granovetter, 1983).

Burt (1992) said that social networks are useful for studying oral effects, and social networks are the density

people know from different networks online or within social networks. The analytical unit of the social network is the exchange of resources between social actors, the accumulation of bilateral exchanges is the building of networks, the exchange of resources can be considered a social exchange relationship, and the individuals who create exchange value have social ties (Wellman & Berkowitz, 1998).

Online social networks have the special nature of virtual communities that are highly heterogeneous among individuals, but beyond geographical, social and economic boundaries to share interests and goals by increasing inter-connectivity among participating members, categorized as a network connectedness, network influence, network size, etc. as a sub-level of social network characteristics (Ibarra, 1997; Morrison, 2002; Burt, 1997). In the preceding study, network connectedness often used to identify the structure of a network, sometimes referred to as the strength of the network. Emotional communication, interrelationships, frequency of communication, etc. were presented to measure network connectedness (Higgins & Kram, 2001), the frequency of contact, the degree of close and interaction were used as measurement variables (Anderson, 1988). Armstrong and Hagel (1997) said that the incentives for users to use online social networks include social motivations such as interest and relationships, the social motivation here means interest or relationship from another person or group. It reveals that the basic motivation for using the online network is not only the desire to obtain new information to solve the problem, but also the motivation to establish social relationships such as altruistic motives and means of self-expression (Henning-Thurau et al., 2004). Therefore, online network connectedness will have a positive relationship with majority opinion and social support on line.

**H2:** The online network connectedness will have a more positive impact on online social decisions, in consumer behavior online.

#### 2.5. Innovative Product

We discussed the sociability of eWOM in the process of personal purchase. eWOM effects will differ from the limitations of information and from the abundance of existing information. For example, for new products with high innovation, information limits and purchasing risks will increase because they provide disruptive value to the value provided by existing products. While innovative new products play an important role in corporate growth, they also have a high risk of failure (Moreau et al., 2001). Because innovative new products have completely different

technologies or features, consumers need more effort and learning to understand and adapt them (Hoeffler, 2003). When evaluating innovative new products, consumers evaluate products based on limited information that exists in their own memories (Bronjarczyk & Alba, 1994).

Consumers will contact various media for new or unknown products to pay more attention to information related to new products, to show higher curiosity about new products and to search for more relevant information. Most new products that are highly innovative compared to existing products have technical functional uncertainty that has not been verified in the market. Consumers will try to shorten the time to familiarize themselves with innovative products. Using sources that require very high reliability, such as positive information of word-of-mouth and peer, religion, etc (Habibollah, Ali, & Soraya, 2014). Likewise online, innovative products require more effort and higher learning costs than older current products to explore and accommodate. Therefore, if consumers perceived greater innovation in the target product, they would respond more to a number of new opinions than to existing knowledge.

**H3:** The innovative product will have a more positive impact on online social decisions, in consumer behavior online.

## 2.6. Category Knowledge

In general, consumers expect and purchase the benefits of a category rather than a particular product itself. Category is a high level concept than product. In some cases, consumers may have different levels of knowledge about the category in the process of purchasing a target product.

For experts with a higher level of product knowledge, a broader information search is made in the processing of information than for beginners with a lower level of knowledge, and thus the assessment of the product is conducted in consideration of a more comprehensive one (De Bont & Schoormans, 1995). If consumers have a high level of knowledge about the product category, it will be easier to explore information and compare products within the category. If consumers have a higher level of category knowledge, they form a larger number of alternatives and more heterogeneous alternatives in consideration set of purchasing (Han, 2019). In general, consumers will try to rely on external sources of information if they have a low level of knowledge about the categories in the purchasing process. Consumers have a higher level of category knowledge at maturity stage than at the introduction stage. Consumers will tend to respond to external information, reviews and social decisions if they have less knowledge of the category.

**H4:** Low category knowledge levels will have a more positive impact on online social decisions, in consumer behavior online.

Meanwhile, in the pre-online era of connectivity, consumers were less affected by an unspecified number of WOM senders in forming attitudes toward brands or in the purchasing process. Also, the WOM information of anonymity was less reliable. In contrast, in an age of connectivity, consumers have a favorable view of the information or opinions that many convey about a particular product or brand. Consumers at the point of purchase consideration are affected by online communities and reviews. In other words, online social decisions will affect consumers in the purchasing process.

**H5:** The online social decisions will have a more positive impact on decision making, in consumer behavior online.

## 3. Research Model and Methodology

### 3.1. Research Model

This study identifies the factors that influence the engagement and support activities of online social consensus, set up online network connectedness, information usefulness, innovative products, and category knowledge as independent variables for online social decisions.

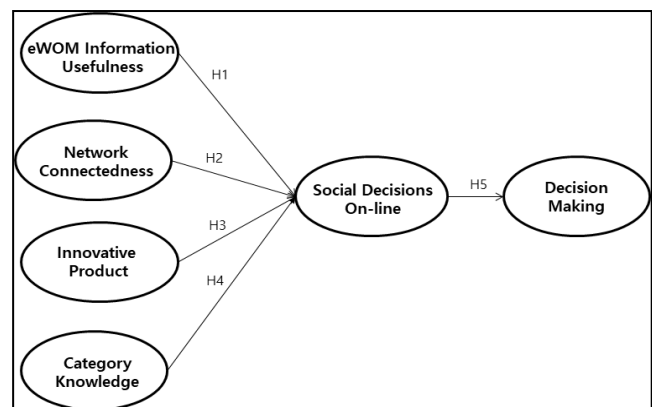


Figure 2: Research Model

### 3.2. Operational Definition and Measurement

Operational definition was made to explore prior research for empirical analysis and to enhance the validity of

measurement tools. Table 1 indicates a measurement item based on an operational definition.

The eWOM information usefulness was defined by eWOM information as valuable information to consumers in making informed decisions about purchase. Online network connectedness was defined as the strength and as the degree of frequency of the network online, Innovative products were defined as functional technological advancements compared to existing products, and category knowledge levels was defined to the overall knowledge of category. In particular, one of the most important concepts in this study was the operational definition of online social decisions, which was defined as a decision made online by consensus and opinion of majority about a particular product or brand. Each variable developed multiple measurement items by referring to the preceding study.

**Table 1 :** Operational definition of variables

Constructs	Measured items	Reference
eWOM information Usefulness	think that a eWOM information is valuable	(Cheung & Thadani, 2012), Davis(1989)
	think that a message of eWOM information is useful	
	think that a message of eWOM information is appropriate	
	a eWOM information is of help to me	
Network Connectedness	involve in various activities on line	Chu & Kim, (2011), Burt(1992)
	have strong ties with others on line	
	connect with a large number of people on line	
	communicate with many people online, when I have an issue,	
Innovative Products	the product are distinguished in terms of functional technology compared to existing one	(Hoeffler, 2003)
	the product are generally more innovative than existing one	
	the product is different from the existing one	
Category Knowledge	have a lot of information about the category with purchase plans	(De Bont et al., 1995).
	have a lot of knowledge about the category with purchase plans	
	be familiar with the various characteristics of the product line	
Social Decisions on-line	think the majority opinion is more important than I know on line	Philip Kotler, et. al (2017)
	trust many people's opinions about a product evaluations on line	
	support a case in which many people form a consensus about a product on line	
Decision-making	I bought it with reference to the opinions and review of many people on line	

### 3.3. Research

In order to carry out the study, the sample selected from was for consumers who had purchased household appliances or personal electronic products within the last three months among male and female adults living in Seoul, Gyeonggi Province and South Chungcheong Province. A single product purchased during the period was selected to respond based on the purchase process at that time. Because it was considered that online WOM activity would be relatively active because the electronic appliances or personal electronic appliances were relatively high. The survey period was conducted from October 2019 to January 2020. Survey methods were conducted in parallel with online e-mail and face-face surveys using structured questionnaires. A total of 256 respondents were statistically analyzed, with the exception of unfaithful responses from the survey. The respondents' characteristics are as follows: There were 112 men (43.7%) and 144 women (56.3%), There were 102 people aged 20-29(39.8%), 112 people aged 30-39(43.8%), and 42 people aged 40-49(16.4%). And the characteristics of occupation are as follows. 98 students (38.3%), 52 workers(20.3%), 45 housewives(17.6%) , 27 self-employed people (10.5%), and 34 others (13.3%).

## 4. Analysis and Hypothesis Verification

### 4.1. Reliability and Validity Analysis

Reliability analysis was performed to verify internal consistency and exploratory factor analysis was performed to verify the validity of the measurement variables. Reliability analysis shows that the Cronbach Alpha value is above 0.6. So it was confirmed to be reliable. The reliability analysis results are as shown in Table 2.

In addition, exploratory and confirmatory factors analysis were performed to confirm the validity. First of all, exploratory factorial analysis has shown that most factor loading values are appropriate.

**Table 2 :** Reliability and validity analysis

Variables	Factors Loading					
	F1	F2	F3	F4	F5	
eWOM information Usefulness	1	<b>.884</b>	.094	.273	.142	.147
	2	<b>.802</b>	.252	.361	.283	-.124
	3	<b>.801</b>	.252	.160	.105	.267
	4	<b>.835</b>	.021	-.066	.113	.135
Network Connectedness	1	.135	<b>.779</b>	.302	.465	.156
	2	-.117	<b>.753</b>	.125	.231	.342

	3	-.126	<b>.821</b>	-.135	.083	.413
	4	.040	<b>.763</b>	-.244	.126	.144
Innovative Product	1	.115	.085	<b>.816</b>	-.146	-.068
	2	-.062	.272	<b>.826</b>	-.153	-.151
	3	.125	-.241	<b>.809</b>	-.183	-.034
Category Knowledge	1	.149	.211	-.123	<b>.808</b>	.163
	2	-.024	.085	.265	<b>.783</b>	-.025
	3	-.124	.051	.352	<b>.799</b>	.037
Social Decisions on-line	1	.132	.192	.185	.068	<b>.842</b>
	2	.123	.158	-.253	.102	<b>.854</b>
	3	.051	-.035	.167	-.173	<b>.833</b>
Eigenvalue		2.633	1.652	2.444	1.753	1.844
Cumulative %		43.412	56.003	75.003	62.216	57.336
Cronbach's Alpha		.842	.784	.825	.796	.861

The results of the confirmatory factor analysis are as follows in Table 3. Confirmatory factor analysis of the relationship between potential and measured variables showed that parameter estimates were greater than zero (0). Each C.R. value, such as the usefulness of eWOM information, online network connectedness, innovative product category knowledge level, online social decisions and purchasing decision making established in this study, was found to be above 1.96. This results appears to be valid.

**Table 3:** Confirmatory Factor Analysis

Variables/scale items	Estimate	Standardized Estimate	C.R	p
eWOM information Usefulness	e1	1.000	-	-
	e2	1.004	0.03	31.62
	e3	0.93	0.03	28.43
	e4	0.75	0.04	16.21
Network Conectedness	n1	1.00	-	-
	n2	0.96	0.03	25.75
	n3	0.88	0.04	21.63
	n4	0.94	0.04	21.42
Innovative Product	i1	1.00	-	***
	i2	0.81	0.26	3.11
	i3	0.89	0.28	3.15
Category Knowledge	c1	1.00	-	-
	c2	1.00	0.02	34.66
	c3	0.96	0.02	35.07
Social Decisions on-line	s1	1.00	-	***
	s2	0.77	0.05	13.232
	s3	0.80	0.06	13.18

### 4.2 Hypothesis Test

To verify the discriminative validity of the variables, the correlation coefficient between the factors and the average variance estimate of each of the two factors was identified. If the AVE value is greater than the square of the correlation coefficient, then there is a validity. The correlated number of squares between factors is less than 0.314 and the AVE value is higher than that, which confirms the discriminative validity. The results of the model fit index show that most conformity assessment is compliant with the criteria.

**Table 4:** AVE & Coefficient of determination

	AVE	eWOM-	Network-	Innovative-	Category-	Social-
eWOM information usefulness	0.832	1				
Network Conectedness	0.743	0.023***	1			
Innovative Product	0.813	0.015***	0.022***	1		
Category Knowledge	0.692	0.040***	0.052***	0.058***	1	
Social Decisions on-line	0.701	0.040***	0.031***	0.100***	0.052***	1

However, the GFI values were somewhat insufficient for the criteria Table 5. However, the model fit is shown to be appropriate.

To verify the impact of independent variables on online social decisions, the statistical analysis of AMOS, a structured model, was conducted. Table 7 shows the results of a hypothesis test using a path analysis.

**Table 5:** Model fit index

Index	Criteria	Result	Acceptance
CMIN / DF	1 ~ 3	1.884	fit
GFI	0.9 ~	0.811	not fit
CFI	0.9 ~	0.921	fit
NFI	0.9 ~	0.913	fit
RMSEA	0.00 ~ 0.10	0.069	fit

**H1:** the eWOM usefulness will have a more positive impact on online social decisions, in consumer behavior online', The results of the H1 test were adopted to the following level, as Estimate=0.472, C.R.=1.095, P<0.05. This confirmed that the more consumers perceive eWOM usefulness as more valuable in the online purchasing

process, the more sympathetic they are to social decisions that are supported by the majority.

**Table 6:** Results of the path model

Paths		Estimate	S.E	C.R	Test results
eWOM information usefulness	→ social decisions on-line	.472	.431	1.095***	H1 (adopt)
network connectedness	→ social decisions on-line	.428	.048	8.917***	H2 (adopt)
innovative product	→ social decisions on-line	.619	.266	2.327***	H3 (adopt)
category knowledge	→ social decisions on-line	.322	.039	8.256***	H4 (adopt)
social decisions on-line	→ decision-making	.453	.184	2.462***	H5 (adopt)

According to result of the hypothesis 2 test, H2 was adopted. at the following levels: Estimate=0.428, C.R.=8.917,  $P < 0.05$ . Therefore, it was confirmed that consumers were linked to multiple people in the online purchasing process and that frequent activities were more sympathetic to social decisions supported by the majority of online users. And the result of the hypothesis test, H3 was adopted. at the following levels: Estimate= 0.619, C.R.=2.327,  $P < 0.05$ . Therefore, the higher the consumer's perception of innovation in the online purchasing process for the products to be considered, the more agreeable with online social decisions that the majority of online consumer support. H4: low category knowledge levels will have a more positive impact on online social decisions, in consumer behavior online. The results of the H4 test were adopted to the following level, as Estimate=0.322, C.R.=8.256,  $P < 0.05$ . Therefore, the lower the level of category knowledge consumers have in their online purchasing process, the more sympathetic they are to social decisions that many online support. And the hypothesis 5 test results were adopted at the level of Estimate=0.453, C.R=2.462,  $P < 0.05$ .

Thus, online social decisions suggest a positive impact on personal decision-making. In other words, it has been confirmed that the majority of opinions online are influencing the individual's decision to purchase.

## 5. Conclusion

### 5.1. Summary

In today's hyper-connected age, consumers are easily and conveniently exposed to other people's opinions and are

also able to participate in such places. You can check out a lot of reviews and share your opinions. This trend will continue in the future. In a smart environment, consumers can make better purchasing decisions than in situations where they make decisions alone, by accessing majority wisdom.

In a smart environment, online social decisions is made in the process of mutual sharing and mutual support by various participants, and individuals may be affected by this online information. And the relevant prior study was reviewed, and the hypothesis to be studied was established. The established hypothesis was verified through the consumer survey.

The main implications of the results are as follows: First, consumers more agree with online social decisions when they perceive eWOM information as more useful in the process of online purchases. Second, consumers agree more with online social decisions if the online network connection is higher than in cases where the online network connection is lower during the online purchase process. Third, when the product consumers want to buy is very innovative, they are more likely to agree with online social decisions. Fourth, consumers agree more with online social decisions when purchasing a product if they lack knowledge of the category than when they have more knowledge of the product category. Finally, online social decisions have a positive effect on purchasing decision-making. This suggests that these results ultimately indicate that social decisions online are directly related to process of consumer decision-making on line.

### 5.2. Discussion

Today, as consumer behavior gradually increases into hyperconnected online areas, the field of consumer behavior research is also providing new meaning. Academically, it provides three meanings. First of all, it has recently changed from an anonymous eWOM influence to a social eWOM influence. Due to the increase in social influence on eWOM, some prior studies, including online social support, have been conducted. However, there is no study yet on online social decisions. In line with the recent changes in the consumption environment, this research is conducted along with the establishment of online social decisions. The study provided a theoretical framework for understanding social decisions on eWOM and further developed research about the online consumer behavior.

Second, this suggest that research about social decisions and eWOM consumer behavior in the mobile smart environment has been studied in depth. Third, this study empirically revealed the factors affecting online social



decisions.

There are also practical implications through this study. First, it suggests that forming a majority of support is very important to persuade consumers to buy goods in a smart online environment. So a marketing manager needs a strategy that can quickly form a lot of support or sponsorship online. Second, by presenting the impact factors on online social decisions in this study, marketing manager can adopt these factors to facilitate consumer purchases online. Third, the marketing manager can see the approach of inducing positive eWOM information and encouraging customers to participate online.

### 5.3. Suggestions

Despite the development of research in the field of online consumer behavior in this study, research has the following limitations: First, there was no abundant mention of concentrated prior research into online social decision making, this is due to the recent emergence of online social decisions concepts. Second, to research, survey was conducted based on purchasing behavior within the last three months for online consumer decisions. There may be errors in the respondents. Research methodology such as experimental design needs to be supplemented in the future. We hope that further research will lead to more multidisciplinary research related to online social decisions. We expect the in-depth study of opinion formation and attitude change through the influence of many people online.

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