O2O서비스에 대한 지각된 품질이 소비자들의 O2O서비스 사용 의도에 미치는 영향: 기술수용모델 관점에서의 접근
Effects of Perceived Quality on Consumers' Intention to Use O2O Services: Focusing on Technology Acceptance Model Perspective

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요약

IT기술의 발전에 따라 소비자의 쇼핑 유형이 다양해지면서 온라인과 오프라인의 경계를 없앤 O2O서비스가 증가하고 있다. O2O서비스의 발달과 함께 온라인의 지속적인 성장과 반대로 한계에 부딪힌 오프라인 유통업체에 새로운 변화를 일으키고 있다. 이러한 변화를 기반으로 본 연구는 선행연구들을 통해 검증된 기술수용모델(Technology Acceptance Model)에 근거하여 O2O서비스의 사용자가 지각하는 서비스품질이 소비자의 O2O서비스 사용의도에 미치는 영향을 확인하고자 한다.

연구 결과 외부변수인 지각된 품질은 기술수용모델의 주요 변수인 지각된 유용성, 지각된 용이성에 영향을 미치고, 또한 지각된 유용성과 용이성은 태도와 행동의도에 유의미한 영향을 미치는 것으로 확인되었다. 특히 사용자의 지각된 용이성이 높을수록 지각된 유용성이 높아지고 태도에 긍정적인 영향을 미치는 것으로 나타났다.

본 연구 결과는 사용자의 O2O서비스 활용도를 높이기 위해서는 인지할 수 있는 서비스의 품질을 부각시키고 동시에 편리성과 유용성에 대한 관리가 필요하다. 이는 O2O서비스를 고도화하고자 시도하는 기업에 의미 있는 방향성을 제공할 것으로 기대된다.

■ 중심어 : | O2O서비스 | 기술수용모델 | 지각된 유용성 | 지각된 용이성 | 지각된 품질 |

Abstract

With the development of IT technology, consumers' shopping behaviors have diversified, and O2O services that remove the boundary between online and offline are increasing. With the development of O2O services, it is bringing about new changes in offline retailers that are facing limitations against the continuous growth of online. Drawing upon Technology Acceptance Model, this study investigates the effect of service quality perceived by O2O service users on consumers' intention to use O2O services.

The result confirmed that the perceived quality, an external variable, affects the perceived usefulness and perceived ease of use, which are the main variables of the Technology Acceptance Model, and the perceived usefulness and perceived ease of use in turn have a significant effect on attitude and behavioral intention. In particular, it was found that the higher the perceived ease of use of the user, the higher the perceived usefulness and positive influence on the attitude.

The results of this study suggest that in order to increase the utilization of O2O service by users, it is necessary to highlight the perceived quality of service and at the same time manage convenience and usefulness. This is expected to provide meaningful directions for companies attempting to advance O2O services.

■ keyword : | O2O Service | Technology Acceptance Model | Perceived Usefulness | Perceived Ease of Use | Perceived Quality |

I. Introduction

The development of the digital technologies generates the diverse consumer touch points and new marketing environment. At an offline platform where the touch point for the shopping considers the experience as being important, while moving to the online and the mobile that emphasize the convenience, the O2O(Online to Offline & Offline to Online) service, which combined the online and offline services, appeared. In the year 2010, the term 'O2O', which had been used for the first time by Alex Rampell, who is the founder of TrialPay, is a business model for purchasing the products or the services online based on the ICT technology and for finding a product at an offline store or for receiving the provision of a service[1][2].

Recently the O2O service is continuously growing. According to the Ministry of Science and ICT(2020), it was totaled as 678 O2O service corporations domestically, 126 trillion won in terms of the amount of the transactions, the amount of the sales of 3.5 trillion won, and the number of the employees of 580,000 people. And it appeared that the amount of the sales had grown by 18.3% compared to the year 2019(2.97 trillion won)[3]. The O2O service that has been applied in the diverse industries and that has been creating the new additional values in the platform economy has been shifting the paradigm of the offline store-based distribution companies that has been falling. According to the Ministry of Trade, Industry and Energy, the online sales had increased by 15.7% in the year 2021. And, in contrast, it appeared that the offline sales had increased by 7.5%[4].

With the growth of the O2O service, academic researchers have investigated various topics regarding the O2O service such as the type of the service from the viewpoint of the industrial circle[5], the role of type of O2O type[6] or service quality[7].

Although the previous studies provide an insight regarding the O2O service-related field, few studies have focused on behaviors or behavioral intentions. Most studies have focused on perceptions or attitudes. When considering O2O service is made to be used for acting, it looks like more researches are needed regarding the factors that have the influences on the behavioral intention rather than attitude. Toward that end, this research investigates the factors influencing the intention to use the O2O service employing the Technology Acceptance Model[8].

The Technology Acceptance Model(TAM) suggests that consumers attitude toward and intention to use new technologies are determined by the perceived usefulness and the perceived ease of use or external factors[9]. The precedent researches adopting TAM have verified the quality(The system, the service, and the information), or individual characteristics influence dependent variables through the perceived usefulness and the perceived ease of use, which are the mediating variables[10-17]. Although the results of the prior studies offer valuable insights regarding the intention to use the O2O service, the following limitations have, also, been included: Firstly, many studies have overlooked the relationship between the attitude and the behavioral intention. Most studies have explored the effect of independent variables on the attitude, the intention to use, and the user satisfaction independently rather

than causal relationships. However, it has been confirmed that the attitude gives a positive influence on the behavioral intention[18-20]. As such, this research will investigate whether attitude can become a precedent variable of the behavioral intention by using the TAM.

Another limitation of the pre-existent researches relates to the point of overlooking the role of the perceived quality(both the objective quality and he subjective quality)[21][22]. Precedent research has revealed that the perceived quality had a significant influence on the perceived usefulness and the perceived ease of use[12][23][24]. As such, in this research, it is intended to take a look at the role of the perceived quality as a precedent variable regarding the perceived usefulness and the perceived ease of use, which are the main variables of the TAM.

In sum, the purpose of this research is to explore the perceived quality will influence the perceived usefulness and the perceived ease of use. Also, we will investigate such perceived usefulness and perceived ease of use, in turn, have the influences on the attitude and the behavioral intention regarding the O2O service. Finally, it will be taken a look at as to whether the attitude regarding the use of the O2O service has a significant influence on the behavioral intention. As the theoretical foundation for this, the Technology Acceptance Model will be applied. The results of this research will extend the literature regarding O2O services by exploring the role of perceived quality in TAM. Also, the results provide practical implications for marketers who practice O2O services such that quality control is important for persuading consumers to use O2O services.

II. Theoretical Background

1. The O2O service

By 'O2O'(Online-To-Offline), as a term that was introduced by Alex Rampell in 2010, with the ICT technology as the basic, by utilizing the online or the mobile, it means the method of inducing the online consumers to the offline. The O2O business has been expansively applied to the diverse services. And the concept, also, gets interpreted diversely[1]. Regarding Ji, Sun, and Liu[25], with O2O being a thing that combines the offline business opportunity with the Internet, the Internet becomes a main activity place of the offline transactions. And they defined that the online service can be used for attracting more consumers. Hwang[26] said that it is a linked business that supplies the more valuable and convenient service to the consumers by intimately connecting the online and the offline.

Although the O2O had intended the support for the offline commerce by inducing the consumers online in the narrow meaning, at the present, it has been seen that both the connection from the online to the offline or the connection from the offline to the online is the O2O[26].

The O2O service can be classified into the forms of the expansion of the commerce and the advancement of the platform business. More specifically, it can be classified into four types: from online to offline, the expansion of the business channel from the offline to the online, the provision of a pre-existent platform-based O2O service, and the platform-based aggregator[26]. Also, the O2O can be classified into three types based on the special characteristics of the service. Firstly, 'the

commerce type' means the case of receiving offline after ordering online or the opposite or the service that is linked with the online and the offline. Secondly, the asset rental type includes the businessmen who belong to the share economy, including the home sharing, the car sharing, the carpool, etc. Lastly, regarding the service-linked type, the provision of the information of the diverse services that take place offline through the online and doing the mediation, including the purchase, the transaction, etc. belong to this[27].

Furthermore, with the growth of big data analytics, the O4O (Online for Offline) service that maximizes the customer experience has been appearing. It is expected that the trend has been advanced more[28]. Also, Kim & Kim[29] had classified the O2O service into two kinds of types. The first had called the service of providing the service that the consumer expects at the desired time point as "the OnDemand service." And, here, there are the taxi, the food delivery, the designated driving, the life helper, etc. The second is the form of providing the O2O service to the pre-existent platform-based business. Regarding the pre-existent, offline company, through the O2O, to the consumers, before the purchase, the diverse marketing activities are possible. And the consumers can obtain the information regarding the prior product and service.

Although the diverse, special characteristics of the O2O service that take place through the fusion of the online and the offline exist, among them, by considering the representative, special characteristics, An and Joo[30] proved that the economy, the convenience, and the social influence that the user of the Kakao taxi had perceived have the positive influences on

the intention to use. Regarding Kim and Kim[31], with regard to the domestic and overseas distribution companies, they presented the directionality of the fashion industry, which is the initial phase of the omni-channel strategy through the analyses of the case examples of the main service, the response and propelling strategy, and the O2O service of the omni-channel of the large-sized marts and the department stores.

2. The Technology Acceptance Model(TAM)

For the successful utilization of the O2O service, the consumers need the understanding regarding the process (the mechanism) of accepting the concerned service. In relation to the acceptance of a new technology, one of the theories that have been applied widely is the Technology Acceptance Model. The Technology Acceptance Model that was proposed for the first time by Davis[8] has been explaining that the creed of the individual user has an influence on the attitude based on the Theory of Reasoned Action of Fishbein and Ajzen[32] and that such an attitude becomes a help in predicting the behavioral intention and the actual behavior. Regarding Davis[8], as the answer regarding the question that was related to what makes the user accept or refuse a new information technology, Davis[8] proposed two kinds of decision factors that have the influences on the use of the information technology. Regarding the perceived usefulness that expects that using a specific system heightens the job efficiency and improves the performance and regarding the use of the system, it is the perceived ease of use that recognizes and believes that it is easy to use without a difficulty or a big effort. Davis[8] set

up the perceived usefulness and the perceived ease of use as the independent variables. And Davis had done a lot of experiments for verifying the Technology Acceptance Model. Davis discovered that both independent variables have the correlations with the technology use of the present and the future. It was discovered that, overall, the perceived usefulness has a deep correlation in the use of the system more than the perceived ease of use. And, in the additional regression analysis, too, it was suggested that the perceived ease of use is not a direct decision factor of the use of the system, but, rather, it can become a precedent factor of the perceived usefulness. Or, in other words, it appeared that the perceived ease of use has an indirect influence on the technological acceptance through the perceived usefulness[8][33].

Also, according to the Technology Acceptance Model, the perceived usefulness and the perceived ease of use have the influences on the attitude of accepting a technology, a product, and a service. Regarding the attitude, with regard to explaining the consumer behavior, it has been considered as a useful information. And it was discovered that it can be represented as a result of the information processing process[34]. Regarding Fishbein and Ajzen[32], they defined that the attitude is the tendency of evaluating and behaving favorably or non-favorably consistently regarding the subject to whom the attitude was given. Also, 'attitude' means the judgment or the evaluation according to one's own criteria regarding the subject. Regarding such an attitude, from the multi-dimensional viewpoint, it is distinguished as the cognitive, emotional, and behavioral elements. And, regarding the cognitive element,

it means the information, the creed, and the knowledge regarding the subject. And, regarding the emotional element, it means the evaluation that is related to the emotion like the feeling and the reaction. And the behavioral element has a relationship with the experience or the behavior of the subject[32][35]. According to the definition of a lot of scholars, the attitude gets learned through the experience. And the emotion of intending to evaluate favorably or non-favorably regarding the subject follows. And having the regularity and the continuity is a special feature[36]. In order to interpret whether a consumer will do or not do a specific behavior, it must be known whether the behavior is liked or disliked. Because this can be explained with the attitude, in the Technology Acceptance Model, the attitude has been considered as a precedent variable that has an influence on the behavioral intention.

Lastly, regarding the behavioral intention, as a scale for measuring the intention to carry out a specific behavior, it plays the role of a middle variable between the attitude of the individual and the actual behavior. And it means the subjective possibility of the individual who will carry out a behavior[37]. Ajzen[38] said that the behavioral intention is the intention of the individual who intends to carry out a given behavior. And Ajzen[38] said that intention is a process that shows how much effort is exerted and planned in order for people to carry out a behavior. Generally, there is the tendency of the ability to carry out a behavior getting heightened the stronger the behavioral intention. Similarly to this, Boulding defined 'behavioral intention' as the creed and the will of an individual who intends to represent a specific behavior after an individual decides the

attitude regarding a specific subject first[39]. In this way, regarding the behavioral intention, as a plan that is connected to the behavior of an individual, it can be thought to be a plan that must be carried out in order to accomplish a specific purpose[40]. Accordingly, regarding the behavioral intention, firstly, it gets organized through the thought like the creed and the will. And such a thought appears, too, by being connected to the repurchase, the recommendation for another person, the reuse, etc. on the dimension of the consumer behavior[41].

As stated above, the Technology Acceptance Model, which has been explaining the relationships between the perceived usefulness, the perceived ease of use, the attitude, and the behavioral intention, has been applied when explaining the behavior of accepting the service field and the product field other than accepting a new information technology. For example, regarding You and Park[42], through a literature examination of the researches regarding the Technology Acceptance Model, they had analyzed regarding the aspects of the model organization, the input variables, the application fields, and the methodology according to the special features of the researches. And they had presented the problems of these researches, and they had proposed a direction for the research in the future. Also, regarding Kim, Lee, and Choi[43], they had verified the associative relations among the motivation to use a smartphone application and the variables of the Technology Acceptance Model. And, based on the usefulness of the smartphone application, they proposed an approach method as an advertisement medium. Regarding Chin and

Kim[44], they proved that, when purchasing a wearable sport product that was created according to the ICT-based fusion, the innovation and the trust of the consumer have the influences on the perceived usefulness and the perceived delight. And, furthermore, they proved that they are the important factors that have he influences on the intention to accept.

In this way, the Technology Acceptance Model has been widely utilized in explaining the use of a specific product, service, etc. by the consumer and not only the acceptance of a technology. Regarding the O2O service, which is the topic of this research, as a thing that belongs to the service field group in the form of e-commerce, by applying the viewpoint of the Technology Acceptance Model, the intention to use of the consumer can be analyzed. However, other variables besides the perceived usefulness and ease of use of the O2O service by the consumer that are presented by the Technology Acceptance Model, the different variables can have the influences. In this research, as a precedent variable that has the influences on the perceived usefulness and the perceived ease of use, it is intended to take a look at the role of the perceived quality.

3. The role of the perceived quality regarding the O2O service for the consumer

Although the Technology Acceptance Model is a useful model in explaining the behavior of adopting a new technology, there is the opinion, too, that it is a simplified model. As such, regarding many scholars, based on the Technology Acceptance Model, by adding the diverse variables (e.g., the systematic factor, the social factor, and the personal factor) that have the influences on the acceptance of a new

technology, product, or service on the part of the consumer or the user, they had attempted to heighten the explanatory power of the model. For example, the scholars had taken a look at the influences of the quality of the system[45], the social pressure[46], the personal, special characteristic factor[47], etc. on the perceived usefulness and the perceived ease of use. As one of such precedent variables, in this research, it is intended to take a look at whether the perceived quality regarding the O2O service that the consumer thinks about in this research plays the role as a precedent variable of the perceived usefulness and the perceived ease of use. The perceived quality can be defined with regard to the diverse aspects. First, the perceived quality that the consumer thinks about can be defined as the quality[21][45] regarding a product or a service that is judged or perceived by the consumer or the judgment of the consumer regarding the overall excellence or extra-ordinariness of the product. The standards of the perceived quality can be classified into the objective quality and the cognitive quality. The cognitive quality can be said to be the subjective viewpoint that is recognized by the consumer[48][49]. Regarding Bettman and Whan[50], they defined that the perceived quality is the emotion regarding the brand, which is an external property. This is on the level of the trust of the consumer who recognizes regarding a specific brand. And the consumer represented that it is the recognition regarding the excellence of the product of the concerned brand. Garvin[51] said that the quality of a product gets formed with eight kinds of measurement factors, including the performance, the function, the reliability, the suitability, the durability, the usability, the

design and the perceived quality. Among these, a few kinds of dimensions include the properties of the product and, at the same time, they reflect the level of preference of the individual. It has been said that some things are objective and transcend the times, and, in contrast, the other things change[51][52]. Among them, in the case of the perceived quality, because the consumer does not possess the complete information regarding the objective properties of the product, it was said that the evaluation is done according to the indirect, special characteristics of the brand, the image, the advertisement, etc.

It appeared that the perceived quality has the influences on the behavioral intention of the consumer and the others of the like. For example, regarding Kim[53], in order to find out the quality that is perceived by the customers who use a family restaurant, five kinds of aspects of the perceived quality that had been presented by Parasuraman, Zeithaml, and Berry[22], among the tangibility, the responsiveness, the reliability, the assurance, and the empathy, it is the dimension of the quality regarding which the reliability, the responsiveness, and the tangibility are perceived. And the fact was discovered the such a perceived quality has the influences on the level of customer satisfaction and the intention to revisit later on. It is thought that, similarly, in the context of the O2O service, the perceived quality of the O2O service will have the influences on the perceived usefulness, the perceived ease of use, and, furthermore, the attitude and the behavioral intention that are perceived regarding the O2O service.

II. Research Hypothesis

1. The relationship between the perceived quality and the perceived usefulness and the relationship between the perceived quality and the perceived ease of use

From the pre-existent research regarding the context of accepting a new technology, the relationships among the perceived quality, the perceived usefulness and ease of use regarding the O2O service can be inferred. For example, for a research regarding the acceptance decision factor of the user of the Internet banking, regarding Chau and Lai[23], who had used the Technology Acceptance Model, based on the Technology Acceptance Model, by adding 4 kinds of variables (Personalization, affiliated service, familiarity, and approachability), they discovered the fact that the quality of the system of the Internet banking is one of the biggest factors that have the influences on the perceived usefulness and the perceived ease of use. Regarding the usefulness that is recognized by the user according to the same logic, also, the influence on their attitude regarding the adoption of a technology was verified. Regarding Kim and Choi[12], in order to understand the influences on the IPTV users satisfaction and the intention to use continuously, based on the Technology Acceptance Model, by utilizing the 5 kinds of the items of the service quality (the tangibleness, the reliability, the responsiveness, the empathy), the acceptance of the information technology (the perceived ease of use, the perceived ease of use), the level of customer satisfaction, the intention to use continuously, and the recommendation

intention, they confirmed the significant relationships among the perceived quality of the service, the perceived usefulness, and the perceived ease of use. And they confirmed that, the higher the quality is recognized, the perceived ease of use gets higher. In a similar way, regarding Jang and Noh[54], in a research regarding the quality of the contents, the quality of the system, and the quality of the service of the IPTV service, they discovered that the service quality has an influence on the perceived usefulness and the perceived ease of use. Also, regarding Jung[55], he verified that, when doing the mobile shopping with a smartphone, the influence of the quality (The reliability, the accuracy, the timeliness, and the detailedness) of the information that was searched in a shopping mall on the level of satisfaction with the information and the perceived usefulness of the mobile shopping mall, the directly influence of the perceived usefulness on the intention to use a shopping mall, the influence on the intention to use with the attitude as the medium, and the level of satisfaction of the customer regarding the information when the information that gets provided at a shopping mall gets around to possessing the above properties of the quality can be improved. Based on the precedent researches before, in this research, in order to verify the relationships among the perceived quality, the perceived usefulness, and the perceived ease of use regarding the O2O service, the following hypothesis was set up.

Hypothesis 1-1: The perceived quality will have a positive effect on the perceived usefulness.
Hypothesis 1-2: The perceived quality will have a positive effect on the perceived ease of use.

2. The relationships among the perceived usefulness, the perceived ease of use, and the attitude

As presented regarding the Technology Acceptance Model before, the perceived usefulness and the perceived ease of use will get around to having the influences on the attitude of the user and the intention to use regarding a new technology and system. And it is anticipated that they will have the influences on the use, too, actually. Also, Davis[8] had revealed that there is a causal relationship between the two creeds, too. Specifically, in a research for verifying the Technology Acceptance Model which had the perceived ease of use and the perceived usefulness as the independent variables, it was verified that the perceived ease of use can become a precedent factor of the perceived usefulness. And it was verified that it can have an indirect influence on the attitude and the intention to accept a technology[16][33][54][56][57]. In relation to the acceptance of a technology, the positive relationship regarding the perceived usefulness of the perceived ease of use in the precedent researches in the diverse fields was verified. And the influence relationships among the perceived ease of use, the perceived usefulness, the attitude, and the behavioral intention had already been proven. Regarding Lederer, Maupin, Sena, and Zhuang[58], in a research regarding the use of a website, they verified the positive influence of the perceived usefulness and the perceived ease of use regarding the website on the attitude to use of the user. Regarding Sohn, Choi, and Hwang[47], in a research of the smartphone adoption behavior using the Technology Acceptance Model, they verified that the recognized ease of use gives a positive influence on the recognized usefulness. And, regarding Shah and Attiq[59], when using the E-learning System, with regard to forming the level of satisfaction of the consumer, they proved the positive influence of the quality of the technology, the convenience of the use and the usefulness that had been recognized on the customer satisfaction. Regarding Ko and Lee[17], in a research that had been related to the motivation to use Facebook, the satisfaction of the user regarding the quality of the information, and the influence on the intention to use, they verified that the perceived ease of use of Facebook has a positive effect on the perceived usefulness of Facebook. Regarding Noh and Lee[60], too, they had analyzed about the relationship between the perceived danger and attitude. which is organized with the economic, social, psychological, and time loss danger that is possessed by social commerce and about the relationships among the perceived usefulness, the perceived ease of use, and the attitude. And, as the moderating effect, they had researched on the collectivism. Although the perceived danger had a negative effect on the attitude, they proved the positive relationships among the perceived ease of use, the perceived usefulness, attitude, and intention. Also, the higher the collectivist tendency, which is a moderator variable, the perceived usefulness had a positive influence on the intention to use. And they confirmed that the attitude has a positive influence on the intention to use. Regarding Jo and Cha[61], they proved the influences of the perceived usefulness of the use and the perceived ease of use regarding the quality of the delivery application on the attitude and the behavioral intention of the consumer. Based on such

results of the precedent researches, in this research, in order to understand the causal relationships among the perceived ease of use, the perceived usefulness, and the attitude, the following hypothesis in relation to this was set up.

Hypothesis 2-1: The perceived ease of use will have a positive effect on the perceived usefulness.

Hypothesis 2-2: The perceived usefulness will have a positive effect on the attitude.

Hypothesis 2-3: The perceived ease of use will have a positive effect on the attitude.

3. The relationship between the attitude and the behavioral intention

In a precedent research that was related to the theory of reasoned action, the theory of planned behavior, and the Technology Acceptance Model, the relationship between the attitude and the behavioral intention was proven. The theory of reasoned action of Fishbein & Ajzen[32] added the behavioral intention between the attitude and the behavior. And the attitude and the subjective canon had been used as the variables that have the influences on the behavioral intention. According to this theory, in a certain situation, the attitude and the subjective canon do not trigger a behavioral intention. Rather, it has been seen that the favorable attitude and the subjective canon trigger a behavioral intention, without fail[62]. By including the variable of the attitude of the theory of reasoned action and the variable of the behavioral control that is perceived in the subjective canon, Ajzen[38][63] presented the theory of planned behavior. And Ajzen said that, when recognizing the fact that there is the controlling ability in behavior, it

has the influences on the behavioral intention and the behavior. Meanwhile, Davis[8] proved the relationships among the Technology Acceptance Model, the principle variable and the attitude, and the behavioral intention.

Based on a theory and a model that were related to the attitude, the diverse researches had been proceeded with in the field of the consumer behavior. And the relationship between the attitude and the behavior had been revealed. Regarding Lee, Koo & and[20], they had researched about the relationships among the value that was perceived with the theory of reasoned action as the foundation, the attitude regarding social commerce, and the intention to use. And they proved the influence of the attitude and the subjective canon on the intention to use. Regarding Ha and Stoel[18], by applying the Technology Acceptance Model, they verified the influences of the quality, the delight, and the trust of the e-shopping on the attitude and the shopping intention of the consumer regarding the e-shopping of the consumer. Also, regarding Wo, Lie, and Fu[19], in relation to the use of the mobile, medical service, based on the theory of planned behavior and the Technology Acceptance Model, the attitude had been taken a look at as a preceding variable that gives the influence on the behavioral intention. And they proved that the influence relationship is feasible.
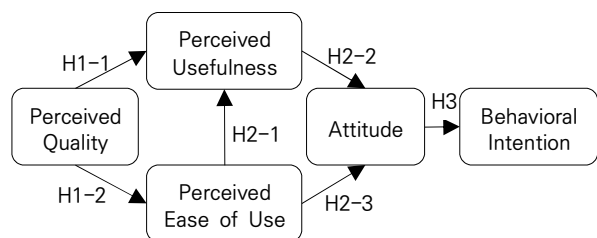

Figure 1. Research Model

In this research, based on a previous research, in order to prove the relationship between the attitude and the behavioral intention, it is intended to present the following hypothesis:

Hypothesis 3: The attitude will have a positive effect on the behavioral intention.

Based on the hypothesis that was presented, regarding this research, with the consumers who had the experience of using the O2O service as the subjects, in order to analyze the influences of the perceived quality of the O2O service on the perceived usefulness, the perceived ease of use, the attitude, and the behavioral intention, as in [Figure 1], a research model is presented. And it is intended to analyze according to this.

Ⅳ. Research Method

1. The research participants

In this research, with the users who have the experience of using the O2O service as the subjects, an online questionnaire survey answer investigation had been carried out. The survey was conducted from July 6th to 10th, 2021. During the time period of the questionnaire survey investigation, a total of 400 copies of the survey questionnaire had been distributed. And, among them, after eliminating the insincere answers, by collecting a total of 311 copies, they had been used as the samples. Regarding the special characteristics of the samples, they are as in [Table 1].

Table 1. Demographics of Respondents

Classification		N	%	Classification		N	%
Gender	Male	160	51.4	Average monthly income (million won)	Less than 1	44	14.1
	Female	151	48.6		From 1 to 2	46	14.8
Total		311	100.0		From 2 to 3	99	31.8
Age	10s	2	0.6		From 3 to 4	53	17.0
	20s	133	42.8		From 4 to 5	27	8.7
	30s	165	53.1		From 5 to 6	18	5.8
	40s	10	3.2		From 6 to 7	9	2.9
	50s	1	0.3		From 7 to 10	10	3.2
Total		311	100.0		10 or more	5	1.6
Marital Status	Single	221	71.1	Total		311	100.0
	Married	90	28.9	Job	Agriculture, Livestock, Fisheries	1	0.3
Total		311	100.0		Management	30	9.6
Education	Under high school	2	0.6		Office	146	46.9
	High school	33	10.6		Sales	29	9.3
	Junior college	8	2.6		Self-employment	12	3.9
	In college	38	12.2		Funcitional/ Simple labor	18	5.8
	Associate's degree	75	24.1		Home Maker	10	3.2
	Bachelor's degree	129	41.5		Student	34	10.9
	Master's degree	26	8.4		Inoccupation	19	6.1
Total		311	100.0		Others	13	3.9
–		–	–	Total		311	100.0

2. The measurements of the variables

In this research, in order to verify the research model and the hypothesis, the manipulative definition and the measurement items of the perceived quality, the perceived usefulness, the perceived ease of use, the attitude, and the behavioral intention, which are the research variables, had been organized. Regarding the measurement items, based on the questions that had been verified in the precedent researches, they had been changed and reorganized to be suitable for the O2O service. Regarding the measurement items, by utilizing the Likert 7-point scale, they had been measured. The specific contents are as in [Table 2].

Table 2. Operational Definition

Variable		Definition	Source
Perceived Quality	PQ1	The quality of O2O service has consistent quality	Sweeney & Soutar (2001)[65]
	PQ2	The quality of O2O service is well-made	
	PQ3	The quality of O2O service has an acceptable standard of quality	
	PQ4	The quality of O2O service has poor workmanship	
	PQ5	The quality of O2O service would not last a long time	
	PQ6	The quality of O2O service would perform consistently	
Perceived Usefulness	PU1	Using O2O service makes me save time	Davis(1989)Yang & Jolly(2009)
	PU2	Using O2O service improves my efficiency	
	PU3	Using O2O service is useful to me	
Perceived Ease of Use	PEU1	Learning to use O2O service is easy for me	
	PEU2	My interaction with O2O service is clear and understandable	
	PEU3	It is easy to make O2O service do what I want them to	
	PEU4	It is easy to use O2O service	
Attitude	AT1	Using O2O service is a good idea	Yang & Jolly(2009)Wu, Li & Fu(2011)
	AT2	I'm favorable about using O2O service	
	AT3	Using O2O service is a wise idea	
	AT4	I'm positive about using O2O service	
Behavioral intention	BI1	Given me chance, I intend to use O2O service	
	BI2	I expect my use of O2O service to continue in the future	
	BI3	I intend to purchase a product or service vis O2O service	

3. The verifications of the reliability and the feasibility

In order to find out about the internal consistency of this research, by using the SPSS 26.0 program, the Cronbach's Alpha coefficient had been confirmed. As a result of the reliability analysis, the values of the Cronbach's Alpha of all of the variables came out as being higher than 0.7. So, it was judged as having secured the level of reliability. The results are as in [Table 3]. In order to prove the single dimensionality of the variables that had been used in this research, by utilizing the AMOS 26.0 program, the Confirmatory Factory Analysis (CFA) had been carried out.

Table 3. Reliability and the confirmatory factor analysis result

Factors	Measured variable	Factor Loading	t	se	AVE	CR	Cronbach's α
Perceived Quality	PQ1	0.723	14.22	0.053	.551	.830	.851
	PQ2	0.811	16.742	0.054			
	PQ3	0.803	16.511	0.053			
	PQ6	0.73	14.415	0.055			
Perceived Usefulness	PU1	0.76	15.298	0.057	.599	.817	.856
	PU2	0.855	18.239	0.055			
	PU3	0.836	17.61	0.056			
Perceived Ease of Use	PEU2	0.828	17.342	0.051	.649	.847	.876
	PEU3	0.837	17.624	0.055			
	PEU4	0.85	18.028	0.055			
Attitude	AT1	0.816	17.264	0.053	.634	.874	.904
	AT2	0.861	18.772	0.055			
	AT3	0.854	18.543	0.054			
	AT4	0.817	17.309	0.056			
Behavioral intention	BI1	0.882	19.479	0.055	.653	.850	.890
	BI2	0.822	17.419	0.057			
	BI3	0.86	18.709	0.054			

x^2=246.650(p=.000), GFI=.916, AGFI=.881, IFI=.967, CFI=.967, RMSEA=.064

The evaluation of the level of suitability regarding the research model had been proceeded with by considering the simplicity of the model. Because they came out as x^2=246.650(p=.000), GFI =.916, AGFI=.881, IFI=.967, CFI=.967, and RMSEA=.064 and because the level of the acceptance of the level of suitability was relatively extraordinary, it was judged that proceeding with a research was possible. Also, among the measurement items, 2 variables of which the factor discretions fall markedly were removed. And it was confirmed that, regarding the t-value (t>14.220), all of them were significant. As in [Table 3], regarding the average variance extraction index (AVE) and the level of the reliability of the concept (CR) that had been proceeded with for verifying the levels of feasibility of the measurement items, because they have been satisfying the standard values (AVE > .5, CR > .7), it was distinguished

as having secured the intensive feasibility.

4. The results of the correlation analysis of the potential variables

Before the verification of the hypothesis, if the correlations of the variables of the research model are taken a look at, it appeared that all of the variables of the perceived quality, the perceived usefulness, the perceived ease of use, the attitude, and the behavioral intention have the significant, positive correlations. Especially, it appeared that, the higher the final academic background, the higher the perceived quality, the perceived usefulness, the attitude, and the behavioral intention. And, regarding the married people, the perceived usefulness, the attitude, and the behavioral intention showed the significant correlations compared to the not-yet-married people. Other than them, regarding the gender, the age, etc., it appeared that they do not have any correlations with the main variables. The results are as in [Table 4].

Table 4. Result of correlation analysis between latent variables

Variables	1	2	3	4	5	6	7	8	9
PQ	1								
PU	.627**	1							
PER	.570**	.618**	1						
AT	.576**	.635**	.625*	1					
BI	.581**	.589**	.595**	.732**	1				
Gender	0.012	0.080	0.063	0.068	0.091	1			
Age	0.028	0.014	0.007	0.051	0.007	-.109*	1		
Educational background	.112*	.104*	0.075	.098*	.099*	-0.029	.210**	1	
Marital status	0.092	.120*	0.081	.117*	.103**	0.018	.370**	0.090	1

* $p < .05$, ** $p < .01$, Correlation Analysis

Ⅴ. Research Results

In this research, in order to prove the relationships among the perceived quality, the

perceived usefulness, the perceived ease of use, the attitude, and the behavioral intention of the user of the O2O service, multiple mediator analysis had been conducted using the SPSS Process Macro 3.0 Model 6. To verify the mediating effect, bootstrapping had been utilized. And the results are as the following: Also, based on a precedent research, the gender, the age, the academic background, and whether or not married, which have the correlations with the main variables, had been used as the control variables.

Table 5. Result of Hypothesis Test

Hypothesis (path)	Path coefficient	t	LLCI	ULCI	R2
H1-1 (PQ→PU)	.8516	20.0674**	.7681	.9351	.5930
H1-2 (PQ→PEU)	.7723	16.3436**	.6793	.8653	.4810
H2-1 (PEU→PU)	.4103	8.9551**	.3201	.5004	.6780
H2-2 (PU→AT)	.6992	17.0588**	.6185	.7798	.5144
H2-2 (PEU→AT)	.7066	17.4597**	.6270	.7862	.5254
H3 (AT→BI)	.7891	18.7406**	.7062	.8720	.7718

* $p < .05$, ** $p < .01$

As a result of the analysis, it appeared that the perceived quality of the user of the O2O service had the meaningful, positive effects on the perceived usefulness (t=20.0674) and the perceived ease of use (t=16.3436). And, regarding the confidence intervals, too, each were [.7681, .9351], [.6793, .8653]. Because they did not include any 0, H1-1 and H1-2 were adopted. As a result, it is possible to know that, the higher the perceived quality of the user of the O2O service, the perceived usefulness and the perceived ease of use get heightened.

It appeared that the perceived ease of use of the user of the O2O service gave the positive effects on both the perceived usefulness

(t=8.9551) and the attitude (t=17.4597). As a matter of course, the confidence intervals ([.3201, .5004]. [.6270, .7862]) do not include a 0. As a result, the H2-1 and the H2-3 were adopted. As a result of the verification of the hypothesis, we can know that, the higher the perceived ease of use of the user of the O2O service, the perceived usefulness gets higher and the attitude gets better.

Next, it appeared that the perceived usefulness of the user of the O2O service had a positive effect on their attitudes (t=17.0588). And the confidence interval ([.6185, .7798]) does not include a 0 while showing a significant value. Hence, the H2-2 was adopted. As a result of the verification of the hypothesis of this research, we can know that, the higher the perceived usefulness of the user of the O2O service, the better their attitudes get.

Lastly, it appeared that the attitudes of the users of the O2O service had a positive effect on their behavioral intentions (t=18.7406). As a result, the H3 was adopted. The confidence interval ([.7062, .8720]), too, does not include a 0. Or, in other words, we can know that, the better the attitude of the O2O user, their behavioral intention gets higher.

V. Conclusions and Suggestions

Regarding the O2O service that began to be introduced ever since 2014, while being mentioned as a service that connects the online and the offline that utilize the ICT fusion technology, from the mediating service initially, at the present, it has been evolving as a high value-added service[66]. Also, according to the increase of the untact demand due to the spreading of the COVID-19 and the social distancing, the O2O service has been growing drastically. Although it is a fact that the researches that were related to the use of the pre-existent O2O service had been proceeded with, the deeper understanding regarding the precedent factors that have the influences on the use of the O2O service has been demanded. As such, regarding this research, as the factors that have the influences on the intention to use the O2O service, the perceived usefulness and the perceived ease of use of the O2O service, which are the two core variables of the Technology Acceptance Model, had been applied. And, going further, it had been intended to take a look at the influence of the precedent variable that has an influence on the perceived usefulness and the perceived ease of use or, in other words, the perceived quality, which is one of the important factors in a consumer deciding to use the O2O service.

The results of this research can be organized as the following: Firstly, it appeared that the perceived quality of the O2O service had the positive effects on both the perceived usefulness and the perceived ease of use, which are the core factors of the intention to use the O2O service. Or, in other words, the increase of the intention to use the O2O service on the part of the consumer and the fact that the quality of the consumer regarding the O2O service in the actual use are the important variables in the actual use were discovered. Especially, it appeared that the perceived quality regarding such a O2O service had the bigger influence on the usefulness among the two core factors of the Technology Acceptance Model. Or, in other words, the consumers had been considering that the O2O service, which is

uniform and which provides the good quality, will be useful in accomplishing their purpose. Such a result appeared in a similar way among the consumers, too, who do the shopping at the online malls. According to a research by Baier and Stüber[13], it appeared that the quality that is perceived at an online mall had a positive influence on the usefulness that the consumers had perceived. Regarding such perceived usefulness, it was confirmed that it had a significant influence on the actual use of a product after going through the intention to use. Secondly, it appeared that the perceived ease of use had given a positive effect on the perceived usefulness. Regarding this, it coincides with the presentation by Davis[8] that, when presenting regarding the pre-existent Technology Acceptance Model, more than the perceived ease of use, the perceived usefulness has a significant relationship with the system utilization. And the perceived ease of use has an influence as a preceding factor of the perceived usefulness. Thirdly, it appeared that both the perceived usefulness and the perceived ease of use have the positive effects on the attitude. Especially, it was confirmed that, the higher the perceived ease of use, the perceived usefulness gets higher. And, furthermore, it was confirmed that it has a significant influence on the attitude. In many precedent researches that had been related to the Technology Acceptance Model, it was empirically proven that the perceived usefulness and the perceived ease of use have the relationships with the positive influences on the attitude and the behavioral intention of the consumer or the user. Fourthly, it appeared that the attitude has a positive effect on the behavioral intention. Before the Technology Acceptance Model, in a precedent research that had been related to the theory of reasoned action and the theory of planned behavior, too, it proved the relationship between the attitude and the behavioral intention[32][63]. Compared to the fact that a considerable number among the pre-existent researches had handled the attitude and the behavioral intention as the collinear, dependent variables, finding out that the attitude is a precedent variable of the intention to use in the context of the O2O service has a meaning.

Based on such results of the research, the following academic and actual work suggestions are as the following: Regarding this research, in the process of accepting a new information technology academically, by adding the precedent variable of the perceived quality to the Technology Acceptance Model that has been used in order to explain the intention of the user, there is the meaning regarding the aspect of having investigated the process from the perceived usefulness, to the perceived ease of use, to the attitude, and until reaching the behavioral intention of the consumer regarding the O2O service. Until now, centered on the usefulness and the ease regarding which the Technology Acceptance Model had been recognized mainly, if the research has been done regarding the part that is related to the technology adoption, the point that the perceived quality was found as a preceding variable of which the explanatory power that has the influences on the actual ease and usefulness is high is thought to have contributed to the expansion of the research field regarding the Technology Acceptance Model. At the present, when evaluating and using a specific service, the consumers consider

the stability, the quality, etc. of the concerned service as important, in the future, when proceeding with a research that is related to the O2O service, even if it is not the viewpoint of the Technology Acceptance Model, there is the need to take a look at the role as a preceding variable or an independent variable of the perceived quality.

Regarding the actual work suggestions of this research, firstly, it suggests that the thing that is considered preferentially by the users of the O2O service with regard to the use of the service is the perceived quality of the concerned service. In order to use the O2O service, the perceived ease of use and the perceived usefulness are important. With regard to the consumer feeling that the concerned service is useful in providing a benefit to him or her and in accomplishing the purpose, it is because the precedent factor is the perceived quality. Hence, a corporation that provides the O2O service is essential to have quality that can satisfy consumers in various aspects of services and products. Therefore it is necessary to minimize the inconvenience regarding the quality that the consumer can recognize and to provide the stable quality with regard to the touch point where the consumer encounters the process or the O2O service for the first time. If it is stabilized in the future, a corporation must endeavor to improve and sustain quality to the extent that it can influence the behavioral intentions and behaviors of consumers through the relationships with consumers.

Secondly, the perceived ease of use had a significant influence on the perceived usefulness. And the perceived usefulness and the perceived ease of use had the influences on the attitude. Such a result means that, in the

context of the O2O service, in order for the consumer to draw the use, to the consumer, together with the provision of the useful benefit that is not provided to other corporations, when the consumer uses the O2O service, without any additional effort, designing a system that can be used easily is important. Or, in other words, it suggests that there is the need to emphasize the convenience and the efficiency of the service that the consumer can feel and recognize[64]. In order to increase the perceived ease and usefulness of consumers, the companies should strive to provide professional and accurate information about services and products while developing satisfactory system quality[15].

Lastly, this research has the following limitations with regard to the theoretical and practical suggestions, too: Firstly, in terms of the convenience, because the empirical research had been proceeded with the O2O service users as the subjects, there is a limitation in generalizing the result. By proceeding with the research that had been centered on the basic concept of the O2O service, the research that has the diverse kinds of business of the O2O service that has been expanded as the subjects could not be proceeded with. In the future, by being based on this research, there is a need to proceed with a comparative research that has the diverse kinds of business as the subjects and there is the need to proceed with an in-depth research regarding the specific kind of business. Secondly, when purchasing a product or a service, the consumer makes the decision by being based on the diverse values other than the price. Zeithaml[48] had classified the concept of value through 4 viewpoints. In this

research, with only the perceived quality, by researching on the influence on the Technology Acceptance Model, there is no choice but to be limited in terms of the theoretical contribution aspect. In the future, regarding the research, by additionally considering the factors of the emotional value (The organization and happiness), the price (The rationality), and the social value, there is a need to design a sample, and there is a need to contribute to the increase of the usefulness of the theory of the Technology Acceptance Model. In the future, a research to be proceeded must overcome such limitations of this research, and a research that fits the special characteristics of the diverse O2O services must take place.

참 고 문 헌

[1] Y. M. Lee, S. Y. Jun, and J. Y. Choi, "A comparative study on quality factors affecting repurchase intention of O2O service," Journal of CEO and Management Studies, Vol.21, No.2, pp.403-427, 2018.

[2] J. H. Lee, "A study on the effect of the customer satisfaction and reuse intention of O2O delivery service quality," The e-Business Studies Vol.20, No.5, pp.125-139, 2019(10).

[3] https://www.msit.go.kr/bbs/view.do?sCode=user&mId=113&mPid=112&bbsSeqNo=94&nttSeqNo=3180128

[4] http://www.motie.go.kr/motie/ne/presse/press2/bbs/bbsView.do?bbs_cd_n=81&bbs_seq_n=165238

[5] D. S. Kim, K. H. Kim, D. U. Choe, and J. Y. Jung, "Service issues and policy directions for promoting the O2O industry in Korea," The Journal of Society for e-Business Studies, Vol.21, No.4, pp.137-150, 2016.

[6] Y. B. Cho and E. H. Cho, "The effect of O2O service characteristics on satisfaction and behavioral intention of customers using the technology acceptance model," Culinary Science & Hospitality Research, Vol.25, No.6, pp.67-78, 2019.

[7] G. I. Kim, "The effect of the quality of Kakao Hair O2O service on user satisfaction and reuse intent," Journal of The Korean Society Design Culture, Vol.24, No.2, pp.43-53, 2018(6).

[8] F. D. Davis, "Perceived usefulness, perceived ease of use, and user acceptance of information technology," MIS quarterly, pp.319-340, 1989.

[9] J. Y. Won, H. C. Kang, and B. Y. Kim, "The effect of food online-to-offline (O2O) service characteristics on customer beliefs using the technology acceptance model," Culinary Science & Hospitality Research, Vol.23, No.7, pp.97-111, 2017.

[10] M. Koufaris, "Applying the technology acceptance model and flow theory to online consumer behavior," Information systems research, Vol.13, No.2, pp.205-223, 2002.

[11] D. Gefen, E. Karahanna, and D. W. Straub, "Trust and TAM in online shopping: An integrated model," MIS quarterly, Vol.27, No.1, pp.51-90, 2003.

[12] Y. H. Kim and S. I. Choi, "Effects of perceived service quality, usefulness and easiness on the consumer satisfaction and the continuous use intention of IPTV," Journal of The Korea Contents Association, Vol.9, No.10, pp.314-327, 2009.

[13] D. Baier and E. Stuber, "Acceptance of recommendations to buy in online retailing," Journal of Retailing and Consumer services, Vol.17, No.3, pp.173-180, 2010.

[14] M. J. Noh and H. Y. Jang, "An effect of the quality of the mobile banking and perceived trust on the reuse intention: focusing on the moderating effects of gender," Journal of Industrial Economics and Business, Vol.24,

No.2, pp.927-952, 2011.

[15] S. I. Pae, "The effect of contents quality and perceived risk on perceived usefulness, perceived ease of use, and behavioral intention of a smartphone application for a foodservice company," International Journal of Tourism and Hospitality Research, Vol.32, No.6, pp.179-195, 2018.

[16] M. H. Ko and C. G. Lee, "The effects of motivation of Facebook on perceived ease of use, perceived usefulness, users' satisfaction, and continuous intention to use by applying technology acceptance model and self-determination theory: focused on students who apply for airline service management," Journal of Tourism and Leisure Research, Vol.31, No.7, pp.379-393, 2019a.

[17] M. H. Ko and C. G. Lee, "The effects of information quality of Facebook and perceived ease of use and usefulness on users'satisfaction and use intention," Journal of Tourism and Leisure Research, Vol.31, No.2, pp.389-403, 2019b.

[18] S. Ha and L. Stoel, "Consumer e-shopping acceptance: Antecedents in a technology acceptance model," Journal of business research, Vol.62, No.5, pp.565-571, 2009.

[19] L. Wu, J. Y. Li, and C.Y. Fu, "The adoption of mobile healthcare by hospital's professionals: An integrative perspective," Decision support systems, Vol.51, No.3, pp.587-596, 2011.

[20] K. T. Lee, D. M. Koo and M. J. Noh, "The effect of customer perceived value on social commerce usage intention," Asia Marketing Journal, Vol.13, No.3, pp.135-161, 2011.

[21] A. Parasuraman, V. A. Zeithaml, and L. L. Berry, "A conceptual model of service quality and its implications for future research," Journal of marketing, Vol.49, No.4, pp.41-50, 1985.

[22] A. Parasuraman, V. A. Zeithaml, and L. L. Berry, "Servqual: A multiple-item scale for measuring consumer perception of service quality," Journal of retailing, Vol.64, No.1, pp.12-40, 1988.

[23] P. Y. Chau, and V. S. Lai, "An empirical investigation of the determinants of user acceptance of internet banking," Journal of organizational computing and electronic commerce, Vol.13, No.2, pp.123-145, 2003.

[24] H. Y. Jang and M. J. Noh, "The integration and communication between marketing and design functions in the development of new products," Korean Industrial Economic Association, Vol.23, No.4, pp.1933-1957, 2010.

[25] S. W. Ji, X. Y. Sun, and D. Liu, "Research on core competitiveness of Chinese retail industry based on O2O," Paper presented at the Advanced materials research, Vol.834, pp,2017-2020, 2014.

[26] J. H. Hwang, "Beyond O2O commerce to On-Demand Economy," DIGIECO Report, Vol.9, 2015.

[27] Y. H. Jung and K. N. Lee, "A study on consumers' problems and improvement methods in O2O service," Korea Consumer Agency, pp.1-232, 2016.

[28] M. S. Kang and Y. E. Lee, "New key trends in digital marketing, O4O. Excellence Marketing for Customer," Vol.54, No.5, pp.62-69, 2020.

[29] J. H. Kim and H. Kim, "A Study on the factors of experience values in the O2O service," Journal of The Korean Society Design Culture, Vol.24, No.1, pp.155-167, 2018.

[30] K. M. An and J. H. Joo, "Factors influencing intention to use Kakao taxi as a O2O service," The Journal of Internet Electronic Commerce Research, Vol.17, No.3, pp.87-105, 2017.

[31] S. Kim and M. Kim, "A study on omni-channel strategy in fashion industry," Journal of the Korean Society of Costume, Vol.67, No.1, pp.40-55, 2017.

[32] M. Fishbein and I. Ajzen, "Belief, attitude, intention, and behavior: An introduction to theory and research," 1977.

[33] Q. Ma and L. Liu, "The technology

acceptance model: A meta-analysis of empirical findings," Journal of Organizational and End User Computing (JOEUC), Vol.16, No.1, pp.59-72, 2004.

[34] J. K. Sohn and S. I. Han, "A study on the effect of attitude, subjective norms and perceived behavioral control on behavior intention toward food tourism: focusing on the modified theory of planned behavior using emotional factors," International Journal of Tourism Sciences, Vol.40, No.3, pp.11-33, 2016.

[35] S. B. Kim and J. W. Seo, "The relationship of tourism crisis impact, attitude and behavioral intention: Focusing on the MERS-coV crisis," International Journal of Tourism and Hospitality Research, Vol.30, No.11, pp.109-119, 2016.

[36] J. K. Kim, "Value-Satisfaction-Attitude-Behavior(VSAB) model development: Focus on hotel loyalty program," Korean Journal of Hotel Administration, Vol.27, No.2, pp.111-130, 2018.

[37] K. Yang and L. D. Jolly, "The effects of consumer perceived value and subjective norm on mobile data service adoption between American and Korean consumers," Journal of Retailing and Consumer services, Vol.16, No.6, pp.502-508, 2009.

[38] I. Ajzen, "The theory of planned behavior," Organizational behavior and human decision processes, Vol.50, No.2, pp.179-211, 1991.

[39] W. Boulding, A. Kalra, R. Staelin, and V. A. Zeithaml, "A dynamic process model of service quality: from expectations to behavioral intentions," Journal of marketing research, Vol.30, No.1, pp.7-27, 1993.

[40] W. S. Choi and S. B. Lee, "The effect of service scape of an Eco-friendly restaurant on customer perceived value, attitude and behavior intention," Culinary Science & Hospitality Research, Vol.18, No.5, pp.45-62, 2012.

[41] G. O. Lee and H. J. Jang, "Study on influencing relationship between experiential value and behavior intention with parameter of consumer`s attitude on food service company," International Journal of Tourism and Hospitality Research, Vol.27, No.4, pp.211-226, 2013.

[42] J. H. You and C. Park, "A comprehensive review of technology acceptance model Researches," Entrue Journal of Information Technology, Vol.9, No.2, pp.31-50, 2010.

[43] J. R. Kim, K. H. Lee, and Y. K. Choi, "A study of motivations and intentions to use smart phone applications as advertising media: An extension of technology acceptance model," Advertising Research, No.89, pp.229-254, 2011.

[44] J. H. Chin and M. J. Kim, "A study on the effect of consumer's innovation, trust on sport wearable products : Focused on extended technology acceptance model," Journal of Tourism and Leisure Research, Vol.29, No.7, pp.425-442, 2017.

[45] D. J. McFarland and D. Hamilton, "Adding contextual specificity to the technology acceptance model," Computers in human behavior, Vol.22, No.3, pp.427-447, 2006.

[46] L. Hossain and A. de Silva, "Exploring user acceptance of technology using social networks," The Journal of High Technology Management Research, Vol.20, No.1, pp.1-18, 2009.

[47] S. H. Sohn, Y. J. Choi, and H. S. Hwang, "Understanding acceptance of smartphone among early adopters using extended technology acceptance model," The Korean Society for Journalism & Communication Studies, Vol.55, No.2, pp.227-251, 2011.

[48] V. A. Zeithaml, "Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence," Journal of marketing, Vol.52, No.3, pp.2-22, 1988.

[49] H. S. Lee and S. J. Lim, "The effect of price and brand on the perceived quality, value and

purchase of clothing," The Korean Society of Clothing and Textiles, Vol.24, No.4, pp.498-509, 2000.

[50] J. R. Bettman and C. W. Park, "Effects of prior knowledge and experience and phase of the choice process on consumer decision processes: A protocol analysis," Journal of consumer research, Vol.7, No.3, pp.234-248, 1980.

[51] D. A. Garvin, "What does 'product quality' really mean," Sloan management review, Vol.25, 1984.

[52] K. Y. Park, S. Y. Yoo, and J. W. Seo, "The effect of perceived quality on experiential value and satisfaction - Focus on 2013 Seoul Motor show," Journal of Tourism and Leisure Research, Vol.25, No.7, pp.401-415, 2013.

[53] H. J. Kim, "Impacts of perceived quality on customer satisfaction and revisit intention in family restaurant," Food Service Industry Journal, Vol.7, No.1, pp.107-123, 2011.

[54] H. Y. Jang and M. J. Noh, "The integration and communication between marketing and design functions in the development of new products," Korean Industrial Economic Association, Vol.23, No.4, pp.1933-1957, 2010.

[55] W. J. Jung, "The effects of perceived information quality of mobile shopping malls on smartphone users'intention to use the shopping malls," Korea Association of Information System, Vol.21, No.3, pp.71-97, 2012.

[56] F. D. Davis, R. P. Bagozzi, and P. R. Warshaw, "User acceptance of computer technology: a comparison of two theoretical models," Management science, Vol.35, No.8, pp.982-1003, 1989.

[57] B. S. Hong and Y. K. Na, "The effect of the perceived hedonic value, usefulness and ease of use on attitude toward using in internet shopping mall and purchase intention of the fashion merchandise," The Korean Society of Clothing and Textiles, Vol.32, No.1, pp.147-156,

2008.

[58] A. L. Lederer, D. J. Maupin, M. P. Sena, and Y. Zhuang, "The technology acceptance model and the World Wide Web," Decision support systems, Vol.29, No.3, pp.269-282, 2000.

[59] H. J. Shah and S. Attiq, "Impact of technology quality, perceived ease of use and perceived usefulness in the formation of consumer's satisfaction in the context of e-learning," Abasyn J. Soc. Sci, Vol.9, No.1, pp.124-140, 2016.

[60] M. J. Noh and K. T. Lee, "The effects of the perceived risk in the users` acceptance of the social commerce: moderating effects of the collectivism," Korean Management Review, Vol.41, No.1, pp.57-87, 2012.

[61] M. N. Jo and J. B. Cha, "Consumer attitudes and behavioral intentions on delivery application quality: Focusing on technology acceptance model (TAM)," Journal of Tourism Science, Vol.41, No.4, pp.171-184, 2017.

[62] R. P. Bagozzi, H. Baumgartner, and Y. Yi, "State versus action orientation and the theory of reasoned action: An application to coupon usage," Journal of consumer research, Vol.18, No.4, pp.505-518, 1992.

[63] I. Ajzen, "From intentions to actions: A theory of planned behavior Action control," Springer, pp.11-39, 1985.

[64] M. N. Jo and J. B. Cha, "Consumer attitudes and behavioral intentions on delivery application quality: Focusing on technology acceptance model (TAM)," Journal of Tourism Science, Vol.41, No.4, pp.171-184, 2017.

[65] J. C. Sweeney and G. N. Soutar, "Consumer perceived value: The development of a multiple item scale," Journal of retailing, Vol.77, No.2, pp.203-220, 2001.

[66] https://www.nipa.kr/main/downloadBbsFile.do?key=113&bbsNo=9&atchmnflNo=11113

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