A Study on the Mediating Effect of Business Attitudes in the Influence of Naver's SmartPlace Information Characteristics on Business Attitudes and Usage Intentions

Hyun Ju Kim

Department of Hotel and Restaurant Management, Hansung University, South Korea

khj671120@naver.com

Abstract. This study analyzed the effect of Naver Smart Place information characteristics on the attitude and actual usage intention of restaurant businesses, and investigated the mediating role of business attitude in this relationship. The aim was to propose theoretical and practical implications for restaurants utilizing such systems. Data from 300 sources were collected and analyzed. All four sub-factors of Smart Place information characteristics—vividness, agreeableness, timeliness, and objectivity—were found to positively influence corporate attitude. Vividness and agreeableness significantly impacted usage intention, while timeliness and objectivity did not. Business attitude strongly and positively influenced usage intention. Furthermore, business attitude mediated the relationship between vividness and agreeableness on usage intention. Therefore, to foster positive customer attitudes when using Naver Smart Place, restaurant businesses should strive to improve all factors including vividness, agreeableness, timeliness, and objectivity. Given that vividness and agreeableness are crucial for enhancing customer usage intention, continuous information updates and service improvements are essential for restaurants to receive positive customer evaluations.

Keywords: SmartPlace information characteristics, business attitude, intention to use, vividness, consent, timeliness, objectivity

1. Introduction

With the 4th Industrial Revolution and the continuous development of the Internet, it has become commonplace for consumers to obtain information online. Korea is an IT powerhouse, boasting the world's highest smartphone penetration rate. A very high percentage of its population uses smartphones, the Internet, and social media. In this environment, online reviews and information are becoming increasingly important because they provide much more trustworthy information than companies, due to their nature of sharing experiences and facilitating interaction between consumers. The proliferation of online reviews and information has made consumers not just buyers of goods but also become marketing agents by creating or sharing information about products or services with others, and more consumers are no longer relying on information or advertisements provided by companies. Furthermore, with the rapid proliferation of social media, many studies have shown that online word-of-mouth information influences consumer behavior.

Purchasing or obtaining information online, on mobile, or on social media has the disadvantage that consumers cannot directly check information about products or services. As a result, consumers who use online information are greatly influenced by word-of-mouth or information from others. According to the Korea Agri-Fisheries Food Distribution Corporation's Restaurant Marketing Trends, online word-of-mouth information is important, with 54.5% of consumers acquiring information about restaurants from reviews by other consumers. In particular, the restaurant industry is characterized by its intangible nature, which makes it difficult to predict the exact service before visiting. When searching for restaurants online, consumers are provided with various information through countless blogs, internet cafes, social media, and restaurant marketing sites. However, it is difficult for consumers to identify reliable information. Additionally, restaurants lack clear guidelines on what information to provide to improve consumer intention to use.

According to the '2022 MyPlace Year-End Settlement' announced by Naver, a total of 8.4 million users wrote 200 million reviews in 2022, and the cumulative number of reviews from 2019, when the MyPlace review service was introduced, to 2022 reached 500 million. MyPlace is a platform that contains reviews and stories about places that reviewers have visited, and it is said that the number of reviewers has exceeded 10 million in just three years since its launch. Therefore, this study aims to identify the relationship between the characteristics of online reviews provided by Naver SmartPlace, which domestic consumers and Internet users highly use, and their positive attitudes and intentions to use the actual business.

Attitude refers to a consumer's consistently favorable or unfavorable feelings or evaluations about something and the tendency to consistently behave positively or negatively toward goods, services, brands, and companies. Attitudes are an individual's evaluation and preference for a particular object or service, as well as their tendency to feelings and behaviors, and are treated as a very important variable in consumer behavior because they determine consumer perceptions and influence feelings and behaviors. In addition, attitudes are not formed spontaneously, but are learned or created by media, oral tradition, and experience, and several studies have reported that online information and oral tradition influence attitude formation for restaurant brands and companies.

These online information characteristics and attitudes toward reviews, restaurants, and brands influence actual usage intentions, which, although intentions do not imply actual purchase or usage, have been used in numerous studies to predict consumers' future behavior. On the other hand, the existing studies on online reviews, information characteristics, and oral opinions have been conducted on attitudes toward the system or platform and intention to continue using it, and the studies related to attitudes toward restaurants have mostly focused on brand attitudes or company attitudes. However, in this study, we aimed to verify how the characteristics of the information provided on Naver's SmartPlace platform, which has not been studied much, can affect the attitudes and actual usage intentions of restaurants related to the information. Through this, we tried to understand what information plays an

important role in increasing consumers' intention to use on platforms where food services companies build and exchange information directly as well as owners like Naver SmartPlace. Furthermore, by verifying the mediating effect of company attitude in this relationship, we aimed to analyze the role of attitude formation and brand attitude toward restaurants in more depth.

2. Literature Review

Naver SmartPlace

Naver SmartPlace is a service that allows you to check detailed information about a shop in conjunction with Naver Maps, including location, business hours, parking lot availability, introduction photos, menus, services, and the management tool used by businesses called "Naver Place." Those two names are used interchangeably. Naver SmartPlace provides a service that allows users to review places they have visited based on their receipts or actual usage. It has introduced receipt review technology using an optical character recognition (OCR) system that prevents consumers' and businesses' fake or malicious reviews. In addition, because it is linked to Naver search and map search, it can be exposed to restaurant searches, etc., and can be highly promoted to consumers who use Naver as a platform, and it performs not only advertising or promotion, but also delivers detailed information about the business to consumers who want to use the business.

Online reviews related to restaurants help consumers make decisions by providing them with information about the food and business, and about amenities, services, etc. In other words, online reviews have the positive function of providing consumers with various information they need and increasing profits for businesses, but fake reviews or negative reviews can cause damage to businesses and businesses and have a greater impact on consumers' decisions. However, unlike other online review systems, Naver has a relative advantage because it requires review verification. Due to these advantages, the consumer usage rate is steadily increasing. As of July 26, 2024, about 2 million businesses are using Naver Place marketing. A study showed that businesses that introduced Naver Business Ads saw an average increase in users by about 6.1 times. Therefore, the study aims to verify the characteristics of Naver SmartPlace empirically.

Online Review Characteristics

Online reviews, such as those on Naver SmartPlace, have developed as the easiest way to access other people's experiences and evaluations of businesses and products like PCs and smartphones, and have become more common. Furthermore, online reviews have become a system that is differentiated from conventional corporate advertisements in that they go beyond the simple listing of information about products and services presented by sellers and business operators to check the original products and services and refer to the experiences and evaluations of people who have used these products and services. This is because, unlike commercial advertisements provided by companies or businesses, online reviews face less resistance from the public and help reduce uncertainty throughout the entire consumption process, from purchase to post-use of products and services. Online reviews can be seen as a form of online word of mouth, which is the informal transmission of information from person to person and has been an important concept and term in marketing and consumer behavior since it was first introduced at Fortune in 1954. Online reviews refer to the communication behavior and process of consumers exchanging information gained through direct and indirect experiences about products and services in online spaces, including the Internet. Therefore, they are recognized as more reliable and relevant than advertisements or promotions from commercial sources, as they are generated and delivered by consumers who have already used the product or service. Many consumers also utilize online reviews to seek information before purchasing to reduce the risk and uncertainty of making the wrong choice.

The characteristics of online reviews and word-of-mouth information can be defined as a

multifaceted concept. This includes the characteristics of the information, the sender, and the medium used for transmission. These characteristics are evident in texts, photos, and videos consumers create through various online and Internet-based media. In other words, the characteristics of information, such as liveliness, trustworthiness, homogeneity, and bonding, which are the characteristics of the reviews and the information itself, are included in the characteristics of the message and affect the perceptions and behaviors of users who obtain information through online oral or reviews. In previous studies on the characteristics of online testimonials and reviews, Elliott categorized the characteristics of oral information into storability and editability, collectivity, openness, and accessibility, and Lee Eun-Young and Lee Tae-Min categorized the characteristics of information obtained in online environments into four factors: vividness, interactivity, consent, and control, and all factors were found to have a significant effect on the effectiveness of online testimonials. Pyo Won-Jung categorized online word-of-mouth information characteristics into cognitive and technical characteristics, with cognitive characteristics consisting of information agreeableness and usefulness, vividness, community interaction, and technical characteristics consisting of ease of use and perceived reputation. Lim Sung-Taek and Cho Won-Sup categorized the characteristics of blogs in the restaurant industry into three factors: agreeableness, vividness, and interaction. In addition, Kim Hye-Sook categorized the characteristics of social media reviews of consumers in the restaurant industry into vividness, agreeableness, timeliness, and neutrality [16], and Son Young-Kwon categorized them into vividness, objectivity, and timeliness. Therefore, based on these previous studies on the characteristics of online reviews and information, this study categorized the Naver SmartPlace online review characteristics into four sub-factors: vividness, consent, timeliness, and objectivity.

Business Attitude

Attitude refers to a consumer's consistently favorable or unfavorable feelings and evaluations toward a particular object. It is a persistent tendency to act based on positive or negative evaluations of a particular product, service, or brand. Izunobi and Burinskiene stated that attitudes are a person's evaluations, preferences, feelings, and behavioral tendencies toward a particular object or idea, and they play a very important role in consumer behavior because they determine that person's perceptions and influence their feelings and behaviors. Therefore, consumers' attitudes toward a particular object, product, or service are considered a key variable in determining consumer behavior because they influence how consumers seek information and make decisions. Many companies and marketers strive to create favorable brand attitudes and company attitudes, especially since these attitudes are not formed spontaneously but rather are learned or created through experiences, oral tradition, media, etc.

In general, attitudes can be measured by the cognitive component, which refers to knowledge, opinions, and beliefs; the affective component, which refers to emotions, feelings, and evaluations; and the behavioral component, which determines the inclination or direction of behavior. Ha Jong-Myung and Lee Ji-Young discussed the components of attitude in the restaurant industry. They stated that the cognitive component is the information consumers acquire by visiting the restaurant and forming personal cognition. On the other hand, the affective component refers to the emotions and feelings about the restaurant's brand, products, and menus. Additionally, behavioral factors encompass actionable acts, specific tendencies, and actual behaviors related to the object towards which consumer attitudes are formed. Lee Na-Gyeom, Byun Kwang-In, and Kim Ki-Jin found that lively and credible SNS posts increase the acceptance of word-of-mouth information. They also found that credibility positively affects consumer attitudes. In addition, homogeneity positively increases the level of acceptance of oral information, consumer attitudes, and intention to re-transmit on SNS and re-transmit offline. Based on these previous studies, this study defines restaurant attitude as the extent to which Naver SmartPlace users form positive attitudes toward a restaurant based on information from online reviews.

Intention to Use a Restaurant

Intention refers to the future behavior that an actor with a specific goal plans to undertake to achieve their objective. It can be considered a kind of probability. Retkutė, K., and Davidavičienė, V. states that based on attitude theory, intentions to purchase, use, or visit are often used in studies to predict consumers' future behavior, even though they don't necessarily indicate actual purchases. In other words, purchase, use, and visit intentions refer to an individual's subjective state. This state includes the relationship between the individual's actual behavior and intention to perform a certain action. These intentions can be defined as decisive factors that directly influence consumer behavior. Intention to use refers to the willingness to use a product or service when perceived as useful. This can significantly impact purchase and usage intentions. This is especially true for interactive information that allows users to exchange opinions and evaluations about brands or companies online. Studies have been conducted on the impact of online information and reviews of restaurants, companies, and brands on intentions to use, reuse, and visit. Based on these studies, this research determined that smart information and company attitudes significantly impact intention to use.

Setting up a Research Model and Hypothesis

Research Models

The research model for this study, established through theoretical background and review of previous studies, is presented in [Figure 1]. The characteristics of SmartPlace information, serving as independent variables, were divided into four sub-factors: vividness, consent, timeliness, and objectivity. The mediating variable, business attitude, and the dependent variable, intention to use, were each composed of a single factor.
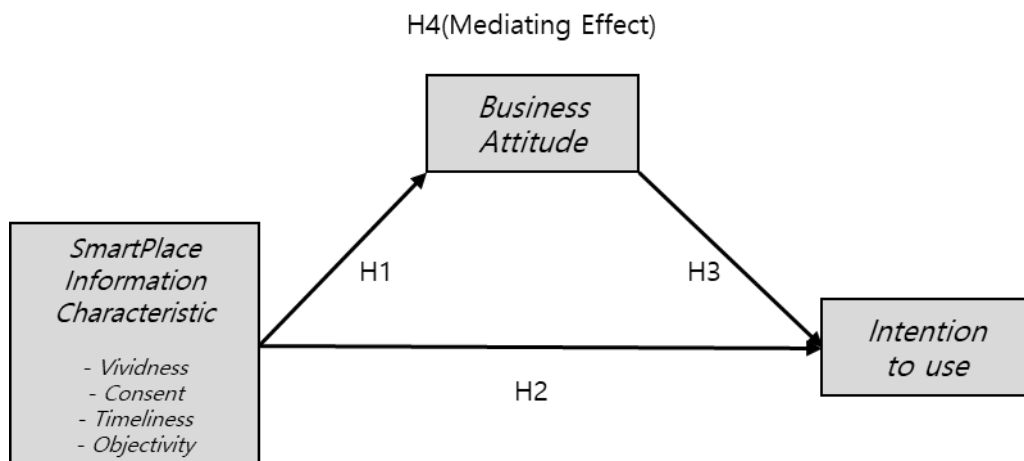

Fig. 1: Research mockup

Setting Up a Hypothesis

In Korea, there has been little research on SmartPlace, a platform that provides online reviews and information. However, there have been some studies on the effects of online reviews and online information characteristics on attitudes in other forms or platforms. A study on the impact of online review characteristics on attitudes, satisfaction, and word-of-mouth at exhibitions found that subfactors of online review characteristics - informativeness, reliability, objectivity, and interactivity - had significant effects on attitudes and behavior. In a study on the impact of online reviewing information characteristics on app users' attitudes, Sohn Young-Kwon found that online oral information characteristics such as vividness, objectivity, and timeliness directly affect consumers' attitudes, and the attitudes formed toward the business there to purchase products and services. In a study on the impact of online review ratings and the number of reviews on restaurant visits, Jung Hyeong-Hak, Choi Ja, and Park Ju-Young found that higher ratings increase visit intention, and most restaurant visitors check reviews. In a study on the relationship between online oral information characteristics, trust, and

purchase intention of Korean food menus on delivery apps, Lee Ga-Hee et al. found that online oral information characteristics such as clarity, agreement, and interactivity affect trust in oral information and that this trust in oral information has a significant positive effect on purchase intention. On the other hand, Lee Jung-Sil et al., in a study on the effect of attitudes related to advertising and trademarks on purchase intention, found that these attitudes toward restaurant companies had a significant impact on purchase intention. In a study on the effect of blog immersion on brand attitude and visit intention toward a restaurant, Kwon found that immersion in blog information had a significant positive effect on both brand attitude and visit intention, and brand attitude also a significant effect on visit intention. In a study on SNS information characteristics, consumer attitudes, and purchase intentions of restaurant companies, Kim Yoon-Seo and Shin Hyung-Chul found that consumer attitudes significantly mediate the relationship between SNS word-of-mouth information characteristics and purchase intentions. Therefore, based on these previous studies, this study hypothesized that SmartPlace information characteristics would affect attitudes and intentionsand that business attitudes would mediate in this relationship.

Hypothesis 1: SmartPlace information characteristics will have a significant impact on business attitudes.

Hypothesis 2: SmartPlace information characteristics will have a significant impact on intention to use.

Hypothesis 3: Business attitudes perceived by consumers will have a significant impact on intention to use.

Hypothesis 4: Business attitudes will play a significant mediating role in the relationship between SmartPlace information characteristics and intention to use.

3. Research Method

Measurement Tools

SmartPlace Information Characteristics

In this study, SmartPlace information characteristics were conceptually defined as the characteristics of information voluntarily written by customers in relation to food service companies provided by online-based platforms, and operational definitions were made based on the degree of characteristics recognized in the information provided by SmartPlace, an online platform. The measurement was divided into four sub-factors: vividness, consent, timeliness, and objectivity based on previous studies, and the measurement questions of Son Young-Kwon, who developed measurement items based on the research of Song Heung-Gyu and Kim Jung-Min, and verified their validity and reliability, were revised and supplemented to suit the purpose of this study. The degree of vividness was composed of questions such as 'the information content of the food service company was vivid as if I had been there in person', and the degree of consent was composed of questions such as 'there were many similar opinions on the content of the food service company information' indicating the degree to which others agreed and presented the same opinion on the information of the food service company. Timeliness was composed of questions such as how up-to-date the information was and how quickly it was updated, and objectivity was composed of questions such as how neutral and unbiased the information was and whether information on the food service company was not biased toward the store owner. The measurement scale was a total of 16 questions, 4 questions for each factor, and the Likert 5-point scale from 'not at all' (1) to 'very much' (5) was used to measure the degree of recognition of information characteristics.

Business Attitude

In this study, business attitude was operationally defined as the degree of consumer preference for the perception and image of a restaurant company, and the measurements, whose validity and reliability were verified in the studies of Jung Yang-Sik and Son Young-Kwon were modified and supplemented to suit the purpose of this study. The measurement scale is a single-factor, three-item scale that uses a

5-point Likert scale ranging from 'not at all' (1) to 'very much' (5) depending on the degree of preference for the attitude and consists of items such as 'I have a positive opinion of the restaurant based on the information provided on Naver SmartPlace'.

Intention to Use

In this study, the intention to use was operationally defined as the degree of willingness and behavioral likelihood of consumers to use a restaurant and to measure it, whose validity and reliability were verified in the studies of Ahn and Kim Jong-Hoon were modified and supplemented to suit the purpose of this study. The measurement scale is a single-factor, three-item scale that uses a 5-point Likert scale ranging from 'not at all' (1) to 'very much' (5), depending on the degree of intention to use the restaurant, and consists of items such as 'I plan to visit and use this restaurant in the future'.

Sampling and Analysis Methods

In this study, consumers who use SmartPlace information provided by domestic platform companies were selected as the population, and samples were collected by requesting a specialized research company for 5 days from April 20 to April 24, 2024, for measurement. The specialized research company distributed an online questionnaire to its panels using a simple random sampling method to collect 300 survey data of respondents who met the purpose of this study. For the response, the self-report method was used in which respondents with experience in SmartPlace use filled out questionnaire items after asking in advance about their expertise of SmartPlace and the frequency of use. The collected data were analyzed using PASW 24.0, a program commonly applied in social science research. Frequency analysis was conducted to understand the general characteristics of the sample. Factor analysis and reliability analysis were conducted to measure the validity and reliability of the measurement items. Bivariate correlation analysis was performed to determine the relationship between variables, and descriptive statistical analysis was used to calculate each variable's mean and standard deviation. In addition, Multiple and simple regression analyses were performed to verify the hypotheses. Additionally, hierarchical regression analysis and Sobel tests were conducted to calculate statistical significance and verify the mediating effect.

4. Research Validation

Sample Characteristics

Frequency analysis was conducted to identify the general characteristics of the sample and the frequency of SmartPlace usage, and the results are shown in Table 1. Gender was almost evenly distributed between 135 males (45.0%) and 165 females (55.0%), and many respondents were in their 30s (32.0%) and 40s (33.3%). Regarding educational background, 205 respondents (68.3%) had completed or were enrolled in graduate school, and 179 respondents (59.7%) were married, slightly more than those who were single. Regarding the use of SmartPlace information, 129 (43.0%) respondents said they used it frequently, and only 2.3% reported low usage, indicating a low frequency of SmartPlace usage among some respondents.

Table 1: Demographic characteristics of the sample, N=300

Variables	Item	Frequency (people)	Percentage (%)
Gender	Male	135	45.0
	Female	165	55.0
Age	20s	24	8.0
	30s	96	32.0
	40s	100	33.3
	50+ years old	80	26.7
Education	High school diploma or less	38	12.7
	Graduated (attended) a two-	30	10.0

	Graduated (attended) a four-	205	68.3
	Graduated (attending	27	9.0
Marital status	Married	179	59.7
	Single	116	38.7
	Other	5	1.7
Frequency of SmartPlace use	I don't use it much	7	2.3
	I use it occasionally	111	37.0
	Frequently used	129	43.0
	I use it almost every time	53	17.7

Exploratory Factor Analysis and Reliability Analysis

SmartPlace Information Characteristics

Exploratory factor analysis and reliability analysis were conducted in this study to verify the validity and reliability of information characteristics recognized by consumers using SmartPlace. The factor extraction used the Varimax method, an orthogonal rotation method through principal component analysis (PCA), and the factor loading was based on 0.4 or more. However, these items were removed because they are conceptually opaque when a factor loading value of 0.5 or more is duplicated in two or more factors or lower than 0.4, but in the first-factoranalysis, item 2 was duplicated in another factor, so corresponding item was removed, and factor analysis was performed again. As a result, it was classified into 4 sub-factors identified in the analysis of SmartPlace as an independent variable, an independent variable, and all factors loading values of each measurement item were 0.5 or more. The KMO value, which indicates the sampling adequacy, was very high at 0.915, and the Bartlett sphericity test value, the correlation matrix for the measurement item for factor analysis, was also found to be significant. Cronbach's Alpha value, which evaluates reliability, is generally judged to be good if it is 0.6 or higher, but the reliability of the sub-factors of the SmartPlace information characteristics of this study was 0.680 to 0.832, which was higher than the standard value, indicating good reliability, Table 2.

Table 2: SmartPlace information characteristics factor analysis and reliability analysis

Metrics	Variable name			
	Vividness	Consent	Timeliness	Objectivity
1. The information on the restaurant was specific.	0.743	0.183	0.149	0.226
3. The information on the restaurant was relatable.	0.561	0.383	0.061	0.352
4. The information on the restaurant provided specific information.	0.739	0.162	0.324	-0.075
5. The information on the restaurant had a high number of views.	0.286	0.701	0.25	0.069
6. The information on the restaurant had a high number of comments.	0.154	0.76	0.218	0.173
7. There were many posts about the information on the restaurant.	0.132	0.688	0.309	0.25
8. There were many recommendations for the information on the restaurant company.	0.119	0.736	0.187	0.242
9. The information on the restaurant in question was up to date.	0.28	0.149	0.729	0.231
10. The information on the restaurant in question is constantly updated.	0.078	0.232	0.761	0.162
11. Information on the restaurant in question was provided immediately.	0.197	0.3	0.687	0.225

12. It seemed that the information on the restaurant in question was updated frequently.	0.158	0.269	0.73	0.207
13. The information on the restaurant in question was objective.	0.458	0.102	0.211	0.653
14. The information about the restaurant was neutral.	0.169	0.233	0.097	0.734
15. The information about the restaurant was not biased towards the restaurant.	-0.002	0.152	0.274	0.762
16. The information about the restaurant did not feel like an advertisement.	0.053	0.2	0.222	0.754
Eigenvalues	2.665	2.656	2.624	1.939
Distributed explanatory power	17.768	17.707	17.491	12.929
Accumulated variance explanatory power	17.768	35.475	52.965	65.894
Cronbach's alpha	0.68	0.818	0.832	0.806
KMO =.915, Approx-χ^2 =1919.740, df =105, p =.000				

Business Attitude and Intention to Use

This study conducted a similar exploratory factor analysis and reliability analysis to verify the validity and reliability of attitudes toward restaurants and actual intention to use restaurants. The factor extraction used the Varimax method, which is a right-angle rotation method through principal component analysis (PCA), and the factor loadings were based on 0.4 or higher. Items with factor loadings of 0.5 or more that were redundantly loaded on two or more factors or were very low (0.4 or less) were removed because they were conceptually unclear. In the first factor analysis, item 2 of intention to use was redundantly loaded on other factors, so it was removed, and factor analysis was conducted again. As a result, both business attitude and intention to use were identified as single-factor constructs, and each measure's factor loadings were above 0.6. The KMO value, which indicates the adequacy of the sample, was 0.851, and the Bartlett's test of sphericity, which is a correlation matrix of the items for factor analysis, was also significant. Cronbach's Alpha values for reliability were 0.786 and 0.734, exceeding the standard threshold of 0.6, indicating good reliability, Table 3.

Table 3: Factor analysis and reliability analysis of company attitude and usage intention

Metrics	Variable name	
	Attitude	Intention to use
1. A positive attitude was formed towards the restaurant based on the information from Naver SmartPlacer	0.812	0.241
2. A favorable impression of the restaurant was developed through the information on Naver SmartPlace.	0.76	0.362
3. The information on Naver SmartPlace made the restaurant more trustable.	0.777	0.261
1. There is an Intention to visit the restaurant seen on Naver SmartPlace.	0.229	0.918
2. Given the opportunity, there is an intention to visit the restaurant found on Naver SmartPlace.	0.495	0.693
Eigenvalues	2.138	1.58
Variance Explanatory Power	42.767	31.607
Cumulative Variance Explanatory Power	42.767	74.373
Cronbach's alpha	0.786	0.734
KMO =.851, Approx-χ^2 =576.640, df =10, p =.000		

5. Findings

Descriptive Statistics and Correlation Analysis

In this study, Descriptive statistics and correlation analysis were conducted on the variables prior to causal and mediating effect analysis. As a result of descriptive statistics analysis, the means of intention to use were the highest at 3.92, and objectivity was the lowest at 3.43. In addition, statistically significant correlations were found between all variables. The correlation coefficient values between each variable ranged from 0.479 to 0.681. Since there were no high correlation coefficient values above 0.8, discriminant validity was judged to be good, Table 4.

Table 4: Descriptive statistics analysis and correlation analysis

Variables	Average	Standard deviation	Vividness	Consent	Timeliness	Objectivity	Business Attitude	Intention to use
Vividness	3.78	0.569	1					
Consent	3.75	0.607	.564**	1				
Timeliness	3.72	0.646	.535**	.624**	1			
Objectivity	3.43	0.663	.484**	.530**	.552**	1		
Business Attitudes	3.72	0.63	.579**	.649**	.601**	.669**	1	
Intention to use	3.92	0.6	.644**	.604**	.509**	.470**	.681**	1

*p<0.05, ** p<0.01*

Verification of Research Hypotheses

The Effect of SmartPlace Information Characteristics on Company Attitudes

The results of multiple regression analysis for Hypothesis 1 of this study, which examines the effect of SmartPlace information characteristics on business attitude, are shown in Model 1 in Table 5 below. Although gender and age, which are control variables, did not affect business attitude, all four sub-factors of SmartPlace information characteristics, which are independent variables, were found to significantly affect business attitude. In detail, vividness had a positive and significant effect on business attitude with $\beta = 0.176$ (t=3.697, p<0.001), consent also had a β-value of 0.271 (t=5.283, p<0.001), timeliness β-value 0.133 (t=2.596, p<0.05), and objectivity β-value 0.365 (t=7.799, p<0.001), which have a positive and significant effect on company attitude. The F-value of the regression model was 74.607 (p < 0.001), and the $R^2 = 0.604$ indicated an explanatory power of 60.4%. The tolerance limits are all less than 1, and the VIF is not more than 10, so there is no multicollinearity, and the DW value is 2.172, which is close to 2 with values from 1 to 4, so the independence of the residuals is also judged to be good [31]. Therefore, Hypothesis 1 is supported.

Impact of SmartPlace Information Characteristics on Intention to Use

Hypothesis 2 of this study's results of multiple regression analysis to verify the effect of SmartPlace information characteristics on the intention to use are shown in Model 2 in Table 5 below, and gender and age, which are control variables, did not affect the intention to use. In addition, vividness and consent among the four sub-factors of SmartPlace information characteristics, which are independent variables, had a significant effect on the intention to use, but timeliness and objectivity were found to have no effect. In detail, vividness had a positive and significant effect on intention to use with a $\beta = 0.406$ (t=7.668, p<0.001), and consent also had a positive and significant effect on intention to use with $\beta = 0.291$ (t = 5.086, p < 0.001). The F-value of the regression model was 50.695 (p < 0.001), and $R^2 = 0.509$ indicated an explanatory power of 50.9%. The tolerance limits were all less than 1, the VIFs were all less than 10, indicating no multicollinearity, and the DW value was 2.066, which is close to 2 on a scale of 1 to 4, indicating good independence of the residuals. Therefore, Hypothesis 2 is partially accepted.

The Impact of Business Attitude on Intention to Use

Model 3 in Table 5 presents the results of the multiple regression analysis conducted to verify Hypothesis 3 of this study, which examines the effect of business attitude on intention to use. The

control variables, gender and age, did not affect intention to use, while business attitude had a positive and significant effect on intention to use (β = 0.682, t=15.938, p<0.001). The F-value of the regression model was 86.133 (p<0.001), and the R^2 = 0.466 for the regression equation showed 46.6% explanatory power. The tolerance limits were all less than 1, the VIFs were all less than 10, indicating no multicollinearity, and the DW value was 2.041, which is close to 2 on a scale of 1 to 4, indicating good independence of the residuals. Therefore, hypothesis 3 is supported.

The Mediating Effect of Business Attitude on the Relationship between SmartPlace Information Characteristics and Intention to Use

The results of the hierarchical regression analysis conducted to verify Hypothesis 4, which examines the mediating effect of business attitude on the relationship between SmartPlace information characteristics and intention to use, can be found in Models 2 and 4 in Table 5. First, to analyze the mediating effect, both the independent variable and the parameter must have a significant effect on the dependent variable, and the independent variable must significantly affect the parameter. In Model 2 of Table 5, the vividness and consent of the SmartPlace information characteristics, which are independent variables, had a significant effect on the intention to use, and in Model 3, the business attitude, which is a parameter, also had a significant effect on the intention to use. In addition, since the vividness and consent of the SmartPlace information characteristics, which are independent variables in Model 1, had a significant effect on the business attitude, which is the parameter, we tried to verify the mediating effect in the relationship between these variables. In hierarchical regression analysis, if the influence of the independent variable on the dependent variable becomes insignificant after including the mediator, it is interpreted as 'complete mediation'. If the influence remains significant but reduced, it is interpreted as 'partial mediation'.

In Model 2 in Table 5, vividness had a significant positive (+) effect on the intention to use with a β-value of 0.406 (t=7.668, p<0.001). Consent had a significant positive (+) effect on the intention to use with a β-value of 0.291 (t=5.086 p<0.001). Still, when looking at Model 4, a parameter, vividness had a slight decrease in influence with a β-value of 0.333 (t=6.614, p<0.001). Consistency also slightly decreased to a β-value of 0.178 (t=3.204 p<0.01), and business attitude, a parameter, was found to have a significant effect on the intention to use with a β-value of 0.415 (t=6.864 p<0.001). Therefore, business attitude partially mediates the relationship between vividness and consent on the intention to use. The results of the Sobel test, conducted to verify the significance of this mediating effect, are presented in Table 6. As a result of verifying the mediating effect of business attitude in the relationship between vividness and intention to use, which is a sub-factor of the SmartPlace, it was found to be significant as z-value=2.270 (p<0.05), and consent was also found to be significant as z-value=1.990 (p<0.05). Therefore, hypothesis 4 was supported.

Table 5: Regression Analysis Results for Hypothesis Testing

Model	Variables	Non-standardization factor		Standardization factor	t	p	Tolerance limits	VIF
		β	S.E.	Beta				
1	(Constant)	0.319	0.206	-.	1.546	0.123		
	Gender	-0.025	0.047	-0.02	-0.531	0.596	0.966	1.035
	Age	-0.001	0.002	-0.02	-0.549	0.583	0.981	1.02
	Vividness	0.195	0.053	0.176	3.697***	0	0.598	1.673
	Consent	0.282	0.053	0.271	5.283***	0	0.512	1.952
	Timeliness	0.13	0.05	0.133	2.596*	0.01	0.514	1.947
	Objectivity	0.347	0.045	0.365	7.799***	0	0.616	1.623

	Dependent variable: Firm Attitude, R² =.604, Adj-R² =.596, F =74.607 (p<.001), DW =2.172							
2	(Constant)	0.661	0.219	-.		3.024**	0.003		
	Gender	0.031	0.05	0.026	0.621	0.535	0.966	1.035
	Age	0.001	0.002	0.02	0.474	0.636	0.981	1.02
	Vividness	0.428	0.056	0.406	7.668***	0	0.598	1.673
	Consent	0.288	0.057	0.291	5.086***	0	0.512	1.952
	Timeliness	0.062	0.053	0.067	1.173	0.242	0.514	1.947
	Objectivity	0.077	0.047	0.085	1.63	0.104	0.616	1.623
	Dependent variable: Intention to use, R² =.509, Adj-R² =.499, F =50.695 (p<.001), DW =2.066							
3	(Constant)	1.395	0.194	-.		7.174***	0		-.
	Gender	0.005	0.052	0.004	0.104	0.917	0.974	1.027
	Age	0.002	0.002	0.043	0.997	0.32	0.989	1.011
	Attitude	0.65	0.041	0.682	15.938***	0	0.984	1.016
	Dependent variable: Intention to use, R² =.466, Adj-R² =.461, F =86.133 (p<.001), DW =2.041							
4	(Constant)	0.535	0.204	-.		2.623**	0.009	-.	-.
	Gender	0.041	0.047	0.034	0.881	0.379	0.966	1.036
	Age	0.002	0.002	0.028	0.729	0.466	0.98	1.021
	Vividness	0.351	0.053	0.333	6.614***	0	0.571	1.751
	Consent	0.176	0.055	0.178	3.204**	0.002	0.468	2.138
	Timeliness	0.011	0.05	0.012	0.218	0.827	0.502	1.992
	Objectivity	-0.06	0.048	-0.067	-1.25	0.212	0.51	1.96
	Attitude	0.395	0.058	0.415	6.864***	0	0.396	2.528
	Dependent variable: Intention to Use, R² =.578, Adj-R² =.567, F =57.021 (p<.001), DW =2.							

* p<0.05, ** p<0.01, , *** p<0.001

Table 6: Sobel-test for verification of mediating effect significance

Independent Variables	Dependent Variable	Mediating Effects	z-value	Two-tailde probability	Parameter type
Vividness	Intention to use	0.138	3.684	0	Partial mediation
Consent		0.074	5.044	0	Partial

6. Conclusion

This study aimed to analyze the impact of SmartPlace online information characteristics provided by Naver (the most widely used platform in Korea) on business attitudes and actual intentions to use. It also sought to verify the mediating effect of business attitudes in these relationships. To achieve this, a professional research company collected and analyzed data from 300 participants over 5 days starting April 20, 2024. Validity, reliability, and correlation analyses were conducted on the measurement items, while regression analysis and Sobel tests were used to examine causal relationships and test hypotheses.

The theoretical and practical implications based on the analysis results of this study are as follows.

Theoretical Implications

First, this study classified the characteristics of online information provided by Naver SmartPlace, a platform with high utilization and numerous actual reviewers, into four categories based on previous studies: vividness, consent, timeliness, and objectivity. Although this area has not been extensively studied academically, our research fills this gap. By verifying the validity and reliability of these online information characteristics, we expect that the measurement items developed in this study will be used in future research related to Naver SmartPlace and similar online information and review platforms.

Second, while previous studies on restaurants have focused on attitudes toward online review systems or social media channels and intentions to continue using them, this study differ by focusing on attitudes toward the restaurants and actual intentions to visit them.

Third, while many studies have reported that attitude significantly affects behavioral intention and completely mediates the effect of other information or perceptions, this study found that both factors are only partially mediated. While attitude is a very important variable that has a high impact on intention to use, the partial mediation of the relationship between online information characteristics and intention to use indicates that online information characteristics have a direct impact on intention to use as well as an indirect effect through the improvement of attitude, which further increases the importance of online information to consumers.

Practical Implications

First, the study found that all four sub-factors of SmartPlace information characteristics - vividness, consent, timeliness, and objectivity - had a significant positive (+) effect on attitudes toward the company. This indicates that factors such as vividness (specific information like actual photos and videos), consent (views, comments, and recommendations), timeliness, and objectivity (giving the impression of genuine information rather than advertisements) are crucial in forming positive attitudes toward the company. Therefore, even if it doesn't lead to immediate sales improvement, companies should consistently update and manage their photos, videos, and related information to enhance vividness and timeliness, fostering positive and favorable attitudes toward the company. In addition, efforts are needed to continuously improve positive reviews, consent, and objectivity through sincere services and customer response so that consumers can post consistent, objective, and favorable reviews and information.

Second, verifying the effect of SmartPlace information characteristics on intention to use, vividness, and consent among the four sub-factors has a significant impact, while timeliness and objectivity did not. Information vividness refers to the specificity and clarity of information, allowing recipients to indirectly experience a product or service through the acquired information. Information provided through various multimedia means is said to induce positive attitudes in users towards accepting the information. Son Jin-Ah and Lee Eun-Young stated that information consent refers to the degree to which other consumers agree with the information provided about a product or service and give their opinions about it, and the higher the perceived degree of agreement, the more likely they are to accept the information. Therefore, vivid photos and videos provided by reviewers or companies, along with the number of views, comments, and recommendations, significantly impact usage intention. Developing strategies to increase positive reviews and recommendations through effective information management and continuous customer promotions is necessary.

On the other hand, timeliness and objectivity did not appear to significantly affect the intention to use. Timeliness refers to the degree to which relevant information is updated immediately, and the latest information is provided. Objectivity means that information about a company is neutral and unbiased, not favoring the owner. While timeliness and objectivity are closely related to the reliability and quality of the information, potentially increasing trust in the information or its provider, they do not seem to directly affect the intention to use the food service company. However, since attitude toward the

company or the reliability of the institution acts as an important factor in improving the intention to use, even if timeliness and objectivity do not directly improve the intention to use, they should not be neglected because various positive effects occur.

Third, the study's results on the impact of business attitude on usage intention showed that business attitude has a strong positive impact on usage intention. Therefore, as improving business attitude significantly increases actual usage intention, enhancing business through smart information management is important. Additionally, efforts should be made to create a positive business image through various events, promotions, community contributions, and service improvements. Recent studies have shown that consumers place greater importance on social responsibility, environmental protection, and ethical management (such as ESG activities) rather than profit-driven marketing and management activities. Therefore, restaurant companies need to fulfill these roles to form and maintain positive attitudes toward their businesses.

Fourth, in examining the mediating effect of business attitude on the relationship between SmartPlace information characteristics and intention to use, it was found that business attitude partially mediated the relationship between vividness and consent on the intention to use. This result indicates that vividness and consent directly affect the intention to use, even though business attitude was a very important variable in the previous analysis. This suggests that the vividness and consent of SmartPlace information characteristics are particularly important. Therefore, it will be possible to actively utilize online reviews and information platforms such as SmartPlace to form a positive attitude toward the company and improve the intention to use through the various measures and marketing efforts mentioned above.

Study Limitations and Suggestions for Future Research

Despite these theoretical and practical implications, this study has the following limitations, and we suggest future research.

First, this study focused on the online characteristics of the Naver SmartPlace platform. Future research would benefit from conducting a comparative study of various platforms and online restaurant information channels to examine differences in information characteristics.

Second, while this study examined the effects of online information characteristics on positive variables such as attitude toward the company and intention to use, future research should explore relationships with other variables, including the content of negative reviews, distrust, and information reliability. In the case of information utilized on a specific platform, the reliability of the information or trust in the platform organization may be very important, so future studies may need to verify the moderating effect of the trust of the platform organization.

Third, while this study analyzed survey data on consumers' use of online information characteristics for businesses, we believe that it would be beneficial to collect data from qualitative research methods, including interviews with experts and discussions with consumer groups, to more precisely identify the features and information characteristics that consumers need from these platforms.

Acknowledgments

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