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A study on the Selection Attributes of Accommodation Applications

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Abstract

We conducted this study to identify the composition factors for consumers' selection attributes of accommodation applications and to identify the differences in the selection attributes perception of accommodation applications based on demographic characteristics and use status. According to the study, 6 factors were derived as the components of the selectivity of accommodation application and were named convenience, interactivity, economic efficiency, transaction reliability, product reliability and informativeness. And the respondents differed in their selection attributes perception of the accommodation application they used. In particular, it was found that the highest perception of informativeness and interactivity, and the lowest perception of product reliability. Finally, there were differences in the selection attributes perception of the accommodation application they used by demographic characteristics and use status. Based on the results of this study, we should strive to derive the effective marketing strategy needed for travel industry-related companies.

1. Introduction

Today, individual leisure activities are steadily increasing due to socioeconomic changes such as the settlement of the 52-hour workweek, the increase in disposable income and the pursuit of quality of life. The universalization of the Internet has greatly increased the purchase of travel packages online. According to the September 2019 online shopping survey released by the Korea National Statistical Office, online shopping transactions of travel and transportation services topped the list with 1.267 trillion won, or 11.34 percent of all online shopping transactions. In particular, the portion of mobile shopping transactions is high at 63.39 percent [1]. A major reason why mobile shopping is booming in travel-related areas is that transactions can be made anytime, anywhere, even while on the move.

So many travel industry-related companies are trying to improve their competitiveness in the mobile shopping market, but competition is getting fiercer and consumers are getting more selective. So far, many of the mobile shopping studies in the travel industry focus on identifying for consumers' selection attributes of accommodation applications. Therefore, in this study, it was also intended to derive various marketing strategy by identifying the selection attributes of accommodation application by consumers with experience in using accommodation applications.

Specifically, the purposes of these studies were as follows: First, to identify the composition factors for consumers' selection attributes of accommodation applications, second, to identify the difference in the selection attributes perception of accommodation applications according to demographic characteristics, and finally, based on the results of this study, to derive the marketing strategy needed for travel industry-related companies
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2. Theoretical background

2.1 Concept of Accommodation Application

Beyond simple tools and means, mobile applications are now evolving into a medium that links online and offline, penetrating deeply throughout our life [2]. The concept of an application is defined as a service that allows users to exchange information they want to know with each other regardless of time or space through a portable device [3-4].Accommodation applications applied to accommodation services have been utilized to compensate for the disadvantages of accommodation services, which have lost their value or lost value over time. In other words, it is an application service that meets the needs of sellers and price-sensitive consumers who want to sell goods that cannot be sold after a certain period of time at a low price. The recent increase in accommodation applications has increased dramatically, as demonstrated by the marketing changes for these accommodations [5-6]. According to a survey of major accommodation O2O companies, accommodation applications will be applied in a variety of areas in the future, and these topics will not easily disappear [7].

2.2 Selection Attributes of Accommodation Application

A number of studies on accommodation applications have attempted to identify selection attributes, which are presented in the main studies as follows.

Convenience is that users get the information they want through the application in the least possible way. It is also a functional convenience to help them navigate information or make purchase decisions. Convenience perceived by consumers refers to the extent to which consumers believe it is easy to use a particular system. It also defines it as a functional aspect of convenience that helps users decide on a purchase or navigate information, and includes the role of easily finding the information they want, as well as helping users use the correct information. In this study, convenience is defined as the convenience of a functional aspect that helps them decide on a purchase or explore information [7-8].

Interactivity is defined to the extent that products and services purchased via interactive communication between businesses and users, such as reviews or comments in applications between users, are effective and well-interpreted in this study [9-10].

The definition of economic efficiency is to minimize the cost of customer time and effort when purchasing or using services[10]. This is a characteristic that reduces customers' time and effort online, thereby increasing their value through reduced costs, thereby influencing customer satisfaction and minimizing perceived time and effort in obtaining information about products mainly in the customer's mobile use. In this study, economic efficiency is defined as the minimization of time and effort as well as the cost of customers when purchasing or using goods and services.

Reliability is a concept that is being studied in various fields and is studied from various angles according to the researcher [10]. People tend to trust new information from people they trust. In addition, trust in the information provided by an acquaintance is greater than that provided unilaterally by an entity. Reliability is a particularly important factor in online transactions because it is difficult to verify the information provided by online transactions. In this study, reliability is defined as how reliable and satisfying the information provided by the accommodation application based on user experience.

Informativeness refers to the extent to which a company provides meaningful information to consumers. There has been a lot of research by scholars on informativeness and it has proven that it plays a very important role in the attitude of consumers toward the information they want. Accommodation applications allow users to obtain a large amount of information by quickly collecting and providing the information desired by various users. By providing various information, accommodation applications are highly informative media, and informativeness is an important factor in the selection attributes [9, 11]. In this study, the informativeness of accommodation application is defined as how meaningful and varied information is provided to consumers.

3. Research method

3.1 Data Collection

The key subjects for this study were adults aged 18 or older in Seoul and Gyeonggi Province with experience in using accommodation applications. The survey was conducted for two weeks from Oct. 30 to Nov. 12, 2019. A total of 350 copies were distributed and 322 copies were recovered, and a total of 300 copies were used for the final analysis, except for 22 parts not available for analysis.

The demographic characteristics of the respondents used in the study are as follows. First of all, male accounted for 52.7% of gender, and 20s accounted for 58.7% of age, followed by those in their 50s with 28.3%.The occupations were followed by students (41.7%), civil servants (19.7%) and housewives (15.3%).Between 5 million won and 7 million won was 48.7%, the highest among household income.

3.2 Measurement

The main variables used in this study are the use status and selection attributes of accommodation applications. Deriving these variables was based on a prior study review and was intended to measure as follows.

First, the use status of accommodation applications was measured by the nominal scale of three items: major use application, frequency of purchase, and source of information. Next, accommodation application selection attributes were measured in 27 questions with a 5-point Likert scale, divided into five attributes: informativeness (5 items), convenience (7 items), reliability (7 items), economic efficiency (5 items), and interactivity (3 items).

4. Result and Discussion

4.1 Exploratory factor analysis and reliability test for the accommodation app. selection attributes

In this study, the exploratory factor analysis was conducted to identify the composition factors for consumers' selection attributes of accommodation applications We performed principle component analysis to verify the validity of the measured items and the VARIMAX rotation to obtain a more concrete and accurate factor.

As shown in Table 1, 6 factors were derived from the exploratory factor analysis and the factor loading

were all over 0.6 an appropriate result for research methods implemented in social sciences. The factors derived were named convenience, interactivity, economic efficiency, transaction reliability, product reliability and informativeness reflecting the characteristics of the items that constitute the factors.

The reliability test was conducted to verify the internal consistency reliability of the factors derived from the factor analysis. The results confirmed that the cronbach's alpha of all factors was over 0.7, thus ensuring internal consistency.

The result of factor analysis for the accommodation application selection attributes showed something unusual. The Reliability identified by a single concept is divided into two constitutive concepts. In other words, it shows that Reliability can be divided into the Transaction Reliability and the Product Reliability.

Table 1. The result of exploratory factor analysis and reliability test

Factors	Variables	Factor loading	Eigen value	Cumulative (%)	Cronbach's alpha
Convenience	Clear and easy-to-understand process	.939	4.643	23.217	.945
	Convenient payment method	.907			
	Easy reservation	.905			
	Quick reservation	.851			
	Easy change/cancel	.851			
Interactivity	Product evaluation sharing	.840	2.683	36.631	.788
	Useful product review	.787			
	Easily use relevant information	.740			
	Provide specialized information	.683			
Economic Efficiency	Price discount	.822	2.211	47.684	.754
	Low price offer	.806			
	Low-priced goods	.639			
Transaction Reliability	Point accumulation	.847	2.099	58.177	.774
	Safe Purchase Process	.839			
	Trust in commodity trading	.784			
Product Reliability	Provide good facilities	.820	1.976	68.058	.703
	Trust in accommodation	.759			
	Prompt problem resolution	.645			
Informativeness	Obtain Required Information	.852	1.887	77.494	.861
	Provide a wide range of information	.821			

4.2 Identifying the difference in the accommodation applications selection attributes perception by demographic characteristics

Analysis of variance (ANOVA) and t-test were conducted to identify the difference in the selection attributes perception of the accommodation application they used by demographic characteristics. As shown in Table 2, overall, the perception of informativeness was highest at 4.04, followed by interaction (3.95), and product reliability (3.22) was lowest ($p < 0.05$).By demographic characteristics, male showed relatively high values for convenience and interactivity and female for product reliability and informativeness.20s were

relatively high in convenience and transaction reliability, 30s in interactivity, economic efficiency, and informativeness, over 50s in product reliability. Students showed relatively high values in convenience, salary man in transaction reliability, professionals in economic efficiency and product reliability, and public officer in interactivity and informativeness. Finally, in terms of income level, convenience of less than 2 million won and more than 7.01 million won were highly recognized for product reliability.

The above results showed that the respondents differed in their selection attributes perception of the accommodation application they used. In particular, it was found that the highest perception of informativeness and interactivity, and the lowest perception of product reliability. Therefore, we should try to ensure that consumers are highly aware of the informativeness and interactivity that accommodation applications provide.

Also, we will try to enhance product reliability, and these efforts will require the use of differences by demographic characteristics.

Table 2. The difference in the selection attributes perception by demographic characteristics

Variables		Factors					
		Convenience	Interactivity	Economic Efficiency	Transaction Reliability	Product Reliability	Informativeness
Gender	Male	3.71	3.98	3.72	3.40	3.06	3.96
	Female	3.14	3.91	3.52	3.42	3.39	4.14
	t-value	6.5***	1.6**	3.51	0.19	4.93***	2.58*
Age	20's	3.84	3.86	3.53	3.51	3.30	4.13
	30's	3.51	4.29	3.78	3.43	2.99	4.18
	40's	2.79	3.89	3.72	3.28	3.21	3.86
	50≤	2.72	3.75	3.33	2.93	3.33	3.63
	F-value	56.80***	21.2***	6.38***	3.97**	3.77**	6.61***
Occupation	Student	3.95	3.84	3.61	3.45	3.22	4.17
	Housewife	2.23	3.96	3.65	3.13	3.33	3.95
	Salaryman	3.24	3.77	3.19	3.67	3.61	3.66
	Self-employed	3.37	3.39	3.19	3.33	3.19	3.64
	Professionals	2.29	3.96	3.90	3.15	3.93	3.85
	Public Officer	3.86	4.36	3.89	3.45	2.58	4.25
	F-value	141.62***	25.61***	15.08***	3.80*	34.50***	7.69***
Household Income	≤200	4.33	4.04	3.36	3.38	3.25	3.79
	201~300	3.80	3.91	3.61	3.50	3.16	4.33
	301~500	2.92	3.83	3.62	3.29	3.32	4.11
	501~700	3.87	4.09	3.69	3.49	3.04	4.18
	701≤	2.86	3.71	3.50	3.38	3.59	3.71
	F-value	52.88***	11.87***	2.36***	1.63*	8.72***	7.66***
Total (F-value=20.02***)		3.44	3.95	3.63	3.41	3.22	4.04

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

4.3 Identifying the difference in the accommodation applications selection attributes perception By use status

ANOVA was conducted to identify the difference in the selection attributes perception of the accommodation application they used by use status. As shown in Table 3, yanolja users showed relatively high values for most of the sellection attributes perception of the accommodation application they used and the hotels combined product reliability. There was a high level perception of interactivity and informativeness among the frequently used people in the frequency of purchases. Finally, site searchers have shown high levels of interactivity and informativeness and people who chose the applications after watching TV ad. showed high level of product reliability. Also email ad. has been a high source of economic efficiency and informativeness.

Therefore, we should strive to establish effective marketing strategies that reflect differences in the selection attributes perception of the accommodation application they used by use status.

Table 3. The difference in the selection attributes perception by use status

Variables		Factors					
		Convenience	Interactivity	Economic Efficiency	Transaction Reliability	Product Reliability	Informativeness
Major used Application	Yanolja	3.95	4.10	3.80	3.44	3.11	4.36
	Yeokieottae	3.50	3.85	3.36	3.70	3.11	3.77
	Airbnb	2.60	3.86	3.55	3.03	3.31	3.84
	Hotels.com	2.87	3.43	3.45	3.54	3.25	3.87
	Hotels Combined	2.49	3.88	3.79	3.32	3.79	3.73
	Expedia	3.08	3.90	3.66	3.06	3.20	4.00
	Trivago	3.13	3.83	2.94	3.22	3.11	3.58
	Agoda	3.13	3.50	3.11	3.00	3.11	3.33
	Etc	3.34	3.57	3.28	3.61	3.52	3.78
	F-value	43.49***	6.91***	8.70***	4.13***	4.31***	11.03***
Frequency of Purchase	Once a year	3.86	3.77	3.52	3.56	3.41	3.75
	Once in 6m.	2.62	3.87	3.73	3.31	3.70	3.77
	Once in 3~4 m.	3.11	3.88	3.66	3.31	3.25	3.85
	Once in 1~2 m.	3.63	4.20	3.48	3.44	2.78	3.65
	Twice a m.	3.84	3.99	3.64	3.49	3.18	4.60
	F-value	27.72***	6.69***	1.60	1.41	11.01***	47.60***
Source of Information	Search site	3.57	4.01	3.70	3.35	2.94	4.18
	Newspaper ad	3.82	3.70	3.26	3.95	3.42	3.54
	Acquaintance Informs	3.10	3.37	3.13	3.38	3.27	3.33
	TV ad	3.14	3.96	3.67	3.37	3.93	3.96
	Email ad	3.17	3.89	3.85	3.23	2.95	4.28
	Subway ad	2.91	4.03	3.57	3.42	3.19	4.07
	Magazine ad	3.05	4.12	3.83	3.83	3.33	4.50
	Etc	3.24	3.85	2.93	3.26	3.13	3.70

F-value	4.298***	6.149***	6.620***	2.776	31.226***	7.87***
Total (F-value=20.02***)	3.44	3.95	3.63	3.41	3.22	4.04

$^{*}p<0.05$, $^{**}p<0.01$, $^{***}p<0.001$

5. Conclusion

We conducted this study to derive the effective marketing strategy needed for travel industry-related companies by identifying the composition factors for consumers' selection attributes of accommodation applications and identifying the differences in the selection attributes perception of accommodation applications based on demographic characteristics and use status.

The results of this study are summarized as follows: First, six factors were derived as the components of the selectivity of accommodation application and were named convenience, interactivity, economic efficiency, transaction reliability, product reliability and informativeness reflecting the characteristics of the items that constitute the factors. Next, the respondents differed in their selection attributes perception of the accommodation application they used. In particular, it was found that the highest perception of informativeness and interactivity, and the lowest perception of product reliability. Finally, there were differences in the selection attributes perception of the accommodation application they used by demographic characteristics and use status.

Based on the results of this study, we should try to ensure that consumers are highly aware of the informativeness and interactivity that accommodation applications provide and to enhance product reliability. Therefore, we should strive to establish effective marketing strategies that reflect differences in the selection attributes perception of the accommodation application they used by demographic characteristics and use status.

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