

A study on the Differences in the Accommodation Applications Selection Attributes by Lifestyles

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Abstract

We conducted this study to identify the accommodation applications users' lifestyle types and the composition factors for consumers' accommodation applications selection attributes and to identify the difference in the selection attributes perception of accommodation applications between groups classified by user's lifestyle types. According to the study, 6 factors were derived as the accommodation applications users' lifestyle types and were named social/leisure-oriented type, fashion-seeking type, culture-seeking type, self-examining type, self-centered type, family-oriented type. Also 6 factors were derived as the accommodation applications selection attributes and were named convenience, interactivity, economic efficiency, transaction reliability, product reliability and informativeness. Valid clusters were divided into four groups and were named culture/tourism group, self-examining group, passive and cautious group and Social and practicality-seeking group. Most of the selection attributes perception of accommodation applications between groups had statistically significant differences ($p < .05$), except for some items of transaction reliability. Based on the results of this study, we should strive to establish effective marketing strategies that reflect differences in the selection attributes perception of the accommodation application between groups classified by users' lifestyle types.

Keywords: Accommodation Application, Users' Lifestyle Types, Selection Attributes, Cluster Analysis

1. Introduction

The advent of the era of globalization has brought many changes to the lifestyle of individuals along with diversification and globalization. Individual leisure activities continue to increase with changes such as settlement of the 52-hour workweek, increase of disposable income and pursuit of quality of life. There are also various factors that contribute to the increase in individuals' participation in leisure activities, but they are particularly closely related to the lifestyle that determines the individual's individuality and life goals.

Meanwhile, the universalization of the Internet has greatly increased the purchase of travel packages online. In particular, the portion of mobile shopping transactions have increased rapidly. 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. Moreover, the penetration rate of mobile phones in Korea was 100 percent, with smartphone users accounting for 95 percent. The percentage of social media users, such as Facebook, Twitter

and YouTube, also recorded 76 percent for adults aged 18 or older.

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. In addition, few of the many mobile shopping studies in the travel industry have identified the difference in the selection attributes perception of accommodation applications according to the accommodation applications users' lifestyle types. Therefore, in this study, it was also intended to derive various marketing strategy by identifying the accommodation applications users' lifestyle types and their accommodation application selection attributes.

Specifically, the purposes of these studies were as follows: First, to identify the accommodation applications users' lifestyle types, second, to identify the composition factors for their selection attributes of accommodation applications, third, to identify the difference in the selection attributes perception of accommodation applications between groups classified by users' lifestyle types, and finally, based on the results of this study, to derive the effective marketing strategy needed for travel industry-related companies.

2. Theoretical Background

2.1 Concept of Lifestyles

Lifestyle in general means a unique lifestyle that is common to members of the community. Since the studies on lifestyle began in earnest in the early 1960s by Lazer[1], many studies on lifestyle have been conducted today in the areas of marketing and consumer behavior[2]. Today lifestyle is used as one of the most effective tools in market segmentation. Under the social phenomenon in which customer class and desire are diversified according to lifestyle, lifestyle is critical to establishing and implementing marketing strategies to survive in the competitive market. In particular, in the field of tourism, many scholars have conducted various studies on lifestyle[3-5].

There are few clearly established theories as to how consumers' lifestyle types are classified in the field of tourism. However, there are two typical approaches used to classify consumers' lifestyle types. One is a typical lifestyle approach and the other is a specific lifestyle approach to identify specific situations or product-related lifestyles[6].

2.2 Concept and Selection Attributes of Accommodation Application

Mobile applications have evolved beyond mere devices into a medium that connects online and offline, and are widely involved in our daily lives. Applications are typically defined as services that allow users to exchange information they want to know with each other via handheld devices regardless of time or space [7-8]. Accommodation applications used in accommodation services are used to compensate for the shortcomings of accommodation services. In other words, the accommodation application is a service that meets the needs of both price-sensitive consumers as well as sellers who want to sell products that are not sold over time.

Many studies on accommodation application selective attributes suggest the following key attributes:

Convenience is for users to get the information they want through the application with minimal effort. It is also functional convenience to help them navigate information or make purchasing decisions. Convenience perceived by consumers means the extent to which consumers find it easy to use a particular system. It is also defined as a functional aspect of convenience that helps users explore information and make purchasing decisions, and includes roles that help users use accurate information. Convenience in this study is defined as a functional aspect of convenience that helps with purchasing decisions or information exploration [9-10].

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[11-12].

Economic efficiency is defined to minimize the cost of customer time and effort when purchasing or using services[12]. This is a characteristic that affects customer satisfaction by increasing value through cost reduction by reducing time and effort online, and also minimizes perceived time and effort in obtaining product information primarily when customers use mobile.

Reliability is a concept that is being studied in various aspects in various fields [12]. People tend to trust

information from people they trust. Reliability is a particularly important factor in online transactions, as consumers find it difficult to verify the information provided in online transactions. In this study, reliability is defined as how reliable and satisfying the information provided by the accommodation application is based on user experience and is classified as transaction reliability and product reliability based on prior research[13].

Informativeness is the extent to which an enterprise provides meaningful information to consumers. Accommodation applications quickly collect and provide the information that a wide variety of users want, allowing users to obtain a large amount of information. Therefore, the informativeness of accommodation applications is an important factor in the selection attributes of accommodation applications[11, 14]. In this study, information quality is defined as the extent to which it provides consumers with meaningful information and a variety of information.

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 three weeks from Feb. 17 30 to Mar. 7, 2020. A total of 330 copies were distributed and 302 copies were recovered, and a total of 285 copies were used for the final analysis, except for 17 parts not available for analysis.

The demographic characteristics of the respondents used in the study are as follows. First of all, male accounted for 53.3% of gender, and 20s accounted for 51.7% of age, followed by those in their 40s with 29.8%. The occupations were followed by students (43.9%), civil servants (20.7%) and housewives (15.8%). Between 5 million won and 7 million won was 51.2%, the highest among household income.

3.2 Measurement

The main variables used in this study are the accommodation applications users' lifestyle types 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 accommodation applications users' lifestyle types were measured in 29 questions with a 5-point Likert scale, divided into six types: fashion-seeking type (5 items), social-oriented type (5 items), practicality-seeking type (5 items), leisure/culture-seeking type (5 items), family-oriented type (5 items), and self-centered type (4 items).

Next, accommodation application selection attributes were measured in 27 questions with a 5-point Likert scale, divided into six attributes: informativeness (5 items), convenience (7 items), transaction reliability (4 items), product reliability (3 items), economic efficiency (5 items), and interactivity (3 items).

4. Result and Discussion

4.1 Exploratory Factor Analysis and Reliability Test for the Measuring Instruments

In this study, the exploratory factor analysis and reliability test were conducted to identify the accommodation applications users' lifestyle types and the composition factors for consumers' accommodation applications selection attributes. 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.

First, as shown in Table 1, 6 factors were derived from the exploratory factor analysis for users' lifestyle types and the factor loading were all over 0.6 an appropriate result for research methods implemented in social sciences. The factors derived were named social/leisure-oriented type, fashion-seeking type, culture-seeking type, self-examining type, self-centered type, family-oriented type 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 0.67, thus ensuring internal consistency.

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

Factors	Variables	Factor loading	Eigen value	Cumulative (%)	Cronbach's alpha
Social/leisure-oriented type	A strong desire to express ability	.866	4.892	23.293	.911
	Easily adapt to surroundings	.863			
	Leisure activities at cost	.739			
	Conversation with multiple people	.736			
	cultural life even if busy	.724			
	Funny as a joke	.622			
	refresh oneself with literary works	.637			
Fashion-seeking type	quick adaptation to fashion trends	.910	3.628	40.571	.865
	purchase of fashionable items	.825			
	fashion rather than practicality	.769			
	a strong desire to buy new products	.583			
Culture-seeking type	a frequent tour of performances	.721	2.444 2	52.207	.749
	great interest in culture and arts	.714			
	efforts for cultural development	.663			
Self-examining type	Believing in my character	.903	2.237	62.860	.731
	preference for famous brands	.744			
	a great interest in fashion articles	.582			
Self-centered type	Leisure activities with family	-.823	2.052	72.631	.746
	Think of yourself as precious	.643			
Family-oriented type	Emphasis on talking with family	.871	1.600	80.249	.670
	Emphasis on leisure time over income	.690			

Next, as shown in Table 2, also 6 factors were derived from the exploratory factor analysis for selection attributes of accommodation applications 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 0.71 thus ensuring internal consistency.

Table 2. The result of exploratory factor analysis and reliability test for selection attributes

Factors	Variables	Factor loading	Eigen value	Cumulative (%)	Cronbach's alpha
Convenience	Clear and easy-to-understand process	.941	4.755	23.775	.956
	Convenient payment method	.911			
	Easy reservation	.904			
	Quick reservation	.848			
	Easy change/cancel	.847			
Interactivity	Product evaluation sharing	.839	2.578	36.665	.789

	Useful product review	.777			
	Easily use relevant information	.738			
	Provide specialized information	.690			
Economic Efficiency	Price discount	.811			
	Low price offer	.803	2.208	47.705	.764
	Low-priced goods	.641			
Transaction Reliability	Point accumulation	.834			
	Safe purchase process	.829	2.088	58.145	.776
	Trust in commodity trading	.778			
Product Reliability	Provide good facilities	.822			
	Trust in accommodation	.765	1.973	68.010	.713
	Prompt problem resolution	.678			
Informativeness	Obtain required Information	.852	1.887	77.445	.861
	Provide Various information	.821			

4.2 Cluster Analysis for the User's Lifestyle Types

A cluster analysis was conducted to classify accommodation application users according to their lifestyle type. The K-means clustering method, which is a non-hierarchical cluster analysis, was implemented because it was based on a relatively large number of data. As a result of the cluster analysis using the factor scores obtained from the factor analysis, when the population was four, the best-classified and finally valid clusters were divided into four. The results of the cluster analysis are shown in Table 3.

As a result of the cluster analysis, 285 users of accommodation applications surveyed were divided into four groups, with 64 (22.5%), 150 (52.6%), 41 (14.4%) and 30 (10.5%) for each group. The first group was named culture and tourism group because of the high number of factors such as self-centeredness and cultural life orientation. For the second group, the factors are called self-examining group due to their high self-examination type. In the third group, the social and leisure trends are high, but the family-centered type is lower than that of other groups, so it is called the passive and cautious group. In the fourth cluster, it was named as a Social and practicality-seeking group due to its high self-centeredness, social and leisure patterns.

A one-way ANOVA was conducted to determine the difference in the mean of the lifestyle types between groups, resulting in significant differences in all lifestyle types, such as Table 3, below a significant level of .05.

Table 3. The results of cluster analysis for the users' lifestyle types

Groups Factors	Culture and Tourism group	Self-examining group	Passive and cautious group	Social and practicality-seeking group	Probability
Social/leisure-oriented type	-.71311	-.06095	.51777	1.17771	.000***
Fashion-seeking type	.31524	-.01456	-.47391	.02947	.001***
Culture-seeking type	.68906	-.01156	.19254	- 1.74223	.000***

Self-examining type	-.74357	.42295	-.68617	.46479	.000***
Self-centered type	1.05247	-.53372	-.75803	1.41189	.000***
Family-oriented type	.13333	.36428	1.51026	1.41189	.000***
Frequency (%)	64 (22.5)	150 (52.6)	41 (14.4)	30 (10.5)	285 (100.0)

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

4.3 Identifying the Difference in the Accommodation Applications Selection Attributes Perception Between Groups Classified by User's Life style Types

ANOVA was conducted to identify the difference in the selection attributes perception of accommodation applications between groups classified by users' lifestyle types.

As shown in Table 4, most of the selection attributes perception of accommodation applications between groups had statistically significant differences ($p<.05$), except for some items of transaction reliability. Specifically, there was no statistically significant difference between groups in the 'safe purchase process' and 'trust in commodity trading'.

Therefore, we should strive to establish effective marketing strategies that reflect differences in the selection attributes perception of the accommodation application between groups classified by user's lifestyle types.

Table 4. The difference in the selection attributes perception between groups

		Culture and Tourism group	Self-examining group	Passive and cautious group	Social and practicality-seeking group	Prob.
Transaction Reliability	Point accumulation	3.70	3.39	3.65	3.26	.014*
	Safe purchase process	3.48	3.27	3.58	3.23	.051
	Trust in commodity trading	3.42	3.29	3.58	3.55	.129
Product Reliability	Provide good facilities	2.97	2.83	2.74	3.81	.000***
	Trust in accommodation	3.55	3.24	2.79	3.81	.000***
	Prompt problem resolution	3.00	3.73	2.70	3.74	.000***
Informativeness	Obtain required Information	4.12	4.18	3.67	3.87	.000***
	Provide Various information	4.10	4.18	3.81	3.94	.002**
Convenience	Easy reservation	3.84	3.07	3.77	4.03	.000***
	Quick reservation	4.26	3.52	3.81	4.13	.000***
	Clear and easy-to-understand	4.03	3.00	3.72	4.03	.000***
	Easy	3.22	2.90	3.72	3.16	.000***

	change/cancel					
	Convenient payment method	3.57	3.01	3.70	4.06	.000***
Interactivity	Product evaluation sharing	3.88	4.04	3.58	4.00	.000***
	Useful product review	3.84	4.11	3.63	3.87	.000***
	Easily use relevant information	3.81	4.08	3.86	4.00	.000***
	Provide specialized information	3.80	4.03	3.79	4.03	.000***
Economic Efficiency	Price discount	3.33	3.81	3.53	3.74	.000***
	Low price offer	3.42	3.80	3.53	3.74	.000***
	Low-priced goods	3.38	3.58	3.56	3.94	.000***

*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 accommodation applications users' lifestyle types and the composition factors for consumers' accommodation applications selection attributes and identifying the difference in the selection attributes perception of accommodation applications between groups classified by user's lifestyle types.

The results of this study are summarized as follows: First, 6 factors were derived as the accommodation applications users' lifestyle types and were named social/leisure-oriented type, fashion-seeking type, culture-seeking type, self-examining type, self-centered type, family-oriented type reflecting the characteristics of the items that constitute the factors. Second, also 6 factors were derived as the selection attributes of accommodation applications and were named convenience, interactivity, economic efficiency, transaction reliability, product reliability and informativeness. Third, valid clusters were divided into four by cluster analysis and were named 'culture and tourism group', 'self-examining group', 'passive and cautious group' and 'Social and practicality-seeking group'. Forth, most of the selection attributes perception of accommodation applications between groups had statistically significant differences(p<.05), except for some items of transaction reliability(safe purchase process, trust in commodity trading).

Based on the results of this study, we should strive to establish effective marketing strategies that reflect differences in the selection attributes perception of the accommodation application between groups classified by users' lifestyle types.

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