

Influence of Brand Personality on Repurchase of LCC Airlines

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Abstract—

Nowadays, many people live with SNS, showing their own lives to others and sharing ideas throughout the day. Thanks to the advanced technology, they need less time than ever to acquire information by using hashtag and only a single word and have no difficulties predicting others' preferences and propensity to consume. Previous research results indicate that people having similar tendencies tend to similar kinds of brand products.

The recent increase on the number of LCC(low-cost carrier) airlines has accelerated the competition in the air transport market, which makes airline companies introduce and apply a new brand strategy to their marketing. However, LCC airliners do not seem to differentiate themselves in their service quality and air-fare, in which circumstances it is not easy to attract new consumers.

This paper is to suggest a new strategic marketing of LCC airliners by doing some research on the relationship between domestic LCC companies' brand tendency and consumers' recurring purchasing.

Keywords— Brand personality, Repurchase, Low cost carrier

I. INTRODUCTION

Recently, Korea's aviation industry is facing the era of 100 million passengers due to low airfare, strong KRW, and changes in leisure life. According to the Ministry of Land, Infrastructure and Transport, the total number of air travelers in 2015 was 9.8% higher than that of 2014 due to the increase in low-cost carrier passengers despite the MERSC(Middle East respiratory syndrome coronavirus). The number of LCC passengers in 2015 was 24.2 million and it exceeded 30 million in 2016.

Until recent years people have been reluctant to use LCC airlines, but LCC airlines are now threatening the existing FSC airlines by attracting new customers with low fare and good service quality. In particular, LCC passengers increased by 22.4% in domestic routes, and the share of transportation has risen to 54.7%. International routes also recorded a share of 14.6% due to a 37.6% increase in international transportation. The number of aircraft operated by LCCs also increased fourfold from 23 in 2009 to 84 in 2015 thanks to the increase of LCC passengers. Unprecedented low oil prices also contributed to earnings growth.

The rapid growth of LCC airlines in Korea is strongly related to the number of established LCC airlines. As of 2016, Korea's LCC airlines such as Jin Air, Air Busan, Jeju Air Easta Air, Tway Air, and Air Seoul are currently in operation and number of other airlines are lined up for permission to operate.

The increase of LCC airlines makes it more competitive in the air transportation market, which leads the brand strategy that has been considered only for tangible products to be one of the major marketing tools in the aviation service industry.

LCC does not show much difference in service quality and air fare, so it is difficult to attract customers with only the fare and service quality. The previous studies show that the airline brand personality affects the choice of airline in the case of domestic consumers. Also the studies indicate that the establishment of airline brand personality contributes to the formation of customer-based brand assets. Hence, the need for research on airline brand personality has been raised.

Previous studies on service satisfaction or repurchase of FSC airlines according to their brand personality have been actively researched, but research on the brand personality of LCC airlines is insufficient.

The purpose of this study is to investigate the relationship between brand personality and service quality of domestic LCC airlines and their customers' repetitive purchasing, and to propose marketing strategies for the LCC airlines.

II. PREVIOUS RESEARCH

Today, the aviation industry is expanding and growing all over the world, but airlines are experiencing a great difficulty in acquiring customers due to various problems such as long-term recession, rising oil prices and the H1N1 flu. Domestic LCC airlines are growing steadily year by year even in this bad environment.

The LCC airlines which receive 30% to 40% of the FSC fare and sell in-flight meals and other supplementary services for a fee are aiming at niche markets of large airlines by reducing operational costs. The number of passengers in China, Japan and Southeast Asia routes of domestic LCC airlines continues to increase, and the operating policies of LCC airlines such as regional departure, contribute to revitalization of local economy.

In this study, we analysed the impact of brand personality on the repurchase of LCC airlines. Brand personality can be expressed in a way that represents human personality. Aaker [1] developed the Brand Personality Scale(BPS) based on the type of person. Sincerity, ruggedness, excitement, competence, and sophistication are suggested as five factors of BPS. This result was from the study conducted in the US market. Many scholars in Korea are actively studying domestic consumers to derive the brand personality composition dimension. Kim [2] suggested brand personality dimension reflecting Korean tendency as emotion, passion, sincerity, and sophistication according to product type and consumer characteristics. Kim [3] studied the brand personality dimension of mobile phone consumers, presented sophistication, motivation, sincerity, and activity as brand personality dimension.

Social exchange theory of social psychology explains repurchase intention as the concept of relationship management. Customer satisfaction is not enough to explain the repurchase [4]. It is suggested that satisfied customers may not repurchase and customers who have experienced dissatisfaction may repurchase. If there is no alternative, customers have no choice but to maintain the current behavior even if it is not satisfactory. Therefore, airlines that are used by diverse customers should find out various factors that can satisfy customers and enhance repurchase intention to maintain the relationship with existing customers.

III. RESEARCH MODEL AND HYPOTHESIS

In this study, we set the five factors of brand personality to be as discussed in Chapter II previous research and conduct a research to identify the relationship between sincerity, competence, sophistication, excitement, and ruggedness brand personality and repurchase intention. The research hypotheses that summarize the relationship among variables of brand personality are as follows.

- H1. Among brand personality factors, sincerity has a positive effect on customer repurchase.
- H2. Among brand personality factors, competence has a positive effect on customer repurchase.
- H3. Among brand personality factors, sophistication has a positive effect on customer repurchase.
- H4. Among brand personality factors, excitement has a positive effect on customer repurchase.
- H5. Among brand personality factors, ruggedness has a positive effect on customer repurchase.

In order to measure the brand personality of the airlines, we used the brand personality scale (BPS) proposed by Aaker [1] and set the five factors as sincerity, competence, sophistication, excitement, and ruggedness. Airline brand personality components used in the research paper of Kwon [5] were used as the questionnaire, and the concept is as shown in Table I.

In a study by Gour and Theingi [6], the satisfaction or dissatisfaction of customers has definitively been found to affect customers' repurchase intention. Based on the previous research, in this paper we analyzed the relationship between brand personality and repurchase, excluding the effect of brand personality on customer satisfaction. Repurchase intention is defined as the intention of the customer to use the service provider repeatedly in the future based on his/her past experiences and use the questionnaire used in Kim Soo-yeon's paper

Table I. Components of brand personality [6]

| Components | Concepts |
|-----------------------|--|
| Sincerity | The overall feeling that customers have about airline brands is to be responsible and true |
| Competence | The overall feeling that customers have about airline brands is to be professional |
| Sophistication | The overall feeling that customers have about airline brands is to be smooth and sophisticated |
| Excitement | The overall feeling that customers have about airline brands is to be modern and cheerful |
| Ruggedness | The overall feeling that customers have about airline brands is to be dynamic and progressive |

IV. EMPIRICAL ANALYSIS

For this study, questionnaires were distributed and retrieved by varying the sex, age and occupation hierarchy from May 1, 2016 to May 31, 2016. A total of 170 questionnaires were distributed, of which 152 were collected. A total of 137 questionnaires were used in the analysis of this study, except for the questionnaire with errors in the data, and an empirical analysis was conducted using the statistical program SPSS.

<Table II> shows the classification by item of the 137 questionnaires. Of the respondents, 89 were female, of which the ratio was higher than that of 48 males. By age, 30s and 40s accounted for the highest percentage of 38.2% of the total, respectively. By profession, it is evenly distributed such as professors and doctors occupy the largest share of 36 people, employees (25 people), service workers (24 people), and self-employed people (20 people). It can be confirmed that the distribution of the respondents in the questionnaire is appropriately distributed. The five LCC airlines that the survey respondents used in the past such as Jeju Air, Easta Air, Jin Air, Tway Air, and Air Busan are evenly distributed from 10% to 20%, respectively.

Table II. Distribution of questionnaires

| - | items | frequencies | (%) Proportions |
|------------|------------------------|-------------|-----------------|
| Gender | Male | 48 | 35.0% |
| | Female | 89 | 65.0% |
| Age | 20's | 14 | 10.2% |
| | 30's | 52 | 38.0% |
| | 40's | 52 | 38.0% |
| | 50's and over | 19 | 13.9% |
| Occupation | Students | 6 | 4.4% |
| | Professors/doctors | 36 | 26.3% |
| | Employees | 25 | 18.2% |
| | Public service workers | 7 | 5.1% |
| | Service workers | 24 | 17.5% |
| | Self-employed people | 20 | 14.6% |
| | Etc | 19 | 13.9% |
| Airlines | Jeju Air | 29 | 21.2% |
| | Easta Air | 31 | 22.6% |
| | Jin Air | 26 | 19.0% |
| | Tway Air | 20 | 14.6% |
| | Air Busan | 31 | 22.6% |

The questionnaire consisted largely of responses to two items. First, the question is about brand personality. Brand personality variables were set to five of sincerity, competence, sophistication, excitement, and ruggedness, four items were asked for each variable.

Table III. Basic statistics of each variable

| | | | | | | | | |
|--------------------|---------------------|---------------------|---------------------|---------------------|-----------------|-----------------|-----------------|-----------------|
| Variables | Sincerity1 | Sincerity2 | Sincerity3 | Sincerity4 | competenc e1 | competenc e2 | competenc e3 | competenc e4 |
| Mean | 3.55 | 3.69 | 3.80 | 3.43 | 3.42 | 3.18 | 3.26 | 3.36 |
| Standard deviation | 0.72 | 0.73 | 0.73 | 0.96 | 0.67 | 0.64 | 0.60 | 0.62 |
| Conversion to 100 | 63.9 | 67.2 | 70.1 | 60.8 | 60.4 | 54.4 | 56.6 | 58.9 |
| Variables | sophisticatio n1 | sophisticatio n2 | sophisticatio n3 | sophisticatio n4 | excitement 1 | excitement 2 | excitement 3 | excitement 4 |
| Mean | 2.71 | 3.00 | 3.09 | 2.75 | 3.67 | 3.48 | 3.42 | 3.56 |
| Standard deviation | 0.61 | 0.78 | 0.77 | 0.74 | 0.57 | 0.67 | 0.63 | 0.68 |
| Conversion to 100 | 42.7 | 50.0 | 52.2 | 43.8 | 66.8 | 62.0 | 60.4 | 64.1 |
| Variables | ruggedness1 | ruggedness2 | ruggedness3 | ruggedness4 | repurchase1 | repurchase2 | repurchase3 | repurchase4 |
| Mean | 3.53 | 3.53 | 3.51 | 3.53 | 3.57 | 3.44 | 3.46 | 3.46 |
| Standard deviation | 0.58 | 0.75 | 0.82 | 0.72 | 0.64 | 0.66 | 0.64 | 0.69 |
| Conversion to 100 | 63.1 | 63.3 | 62.8 | 63.1 | 64.2 | 60.9 | 61.5 | 61.5 |

The questions related to repurchase of LCC airlines consist of 4 items : ① I will continue to use this airline the next time. ② I would recommend this airline to others. ③ I will tell others about the merits of this airline. ④ I would recommend to friends and acquaintances to use this airline.

The brand personality variable and the repurchase variable consisted of a Likert 5-point scale. Table III shows the basic statistics of brand personality variables and repurchase variables. The overall score of brand personality variables of LCC airlines is good. Especially, excitement and ruggedness variables are higher than sophistication variables, which confirm that young and lively images of LCC airlines are being recognized by consumers. The repurchase variable also has a good score, so it can be confirmed that there is a considerable part of the repurchase intention of the users.

Second, factor analysis is performed to determine whether the items designed to measure each brand personality are meaningful, and Cronbach alpha (α) was measured to determine the reliability (internal consistency). The results of the factor analysis are summarized in Table IV. The reliability coefficients show that each brand personality variable (ruggedness, sophistication, sincerity, etc.) is well organized for each group.

Table IIIIV. Factor Analysis of brand personality variables

| | Factor1 | Factor2 | Factor3 | Factor4 | Factor5 |
|-----------------|---------|---------|---------|---------|---------|
| ruggedness3 | 0.90 | 0.10 | 0.13 | 0.25 | 0.09 |
| ruggedness2 | 0.88 | 0.15 | 0.22 | 0.19 | 0.14 |
| ruggedness1 | 0.85 | 0.17 | 0.04 | 0.20 | 0.11 |
| ruggedness4 | 0.84 | 0.23 | 0.32 | 0.04 | 0.15 |
| sophistication2 | 0.65 | 0.11 | 0.23 | 0.58 | 0.04 |
| sincerity2 | 0.21 | 0.90 | 0.19 | -0.03 | -0.04 |
| sincerity3 | 0.27 | 0.86 | 0.13 | 0.01 | -0.13 |

| | | | | | |
|-----------------------------------|-------|-------|-------|-------|-------|
| sincerity1 | 0.03 | 0.76 | 0.07 | 0.20 | 0.20 |
| sincerity4 | 0.05 | 0.75 | 0.18 | 0.22 | 0.25 |
| excitement1 | 0.10 | 0.25 | 0.83 | 0.09 | -0.04 |
| excitement4 | 0.11 | 0.13 | 0.80 | -0.07 | 0.15 |
| excitement2 | 0.30 | 0.09 | 0.76 | 0.30 | 0.02 |
| excitement3 | 0.24 | 0.11 | 0.54 | 0.13 | 0.47 |
| sophistication3 | 0.46 | 0.17 | 0.12 | 0.77 | 0.02 |
| sophistication4 | 0.47 | 0.06 | 0.00 | 0.74 | 0.16 |
| sophistication1 | 0.09 | 0.19 | 0.22 | 0.65 | 0.49 |
| competence3 | 0.25 | 0.34 | 0.16 | -0.27 | 0.72 |
| competence1 | -0.07 | -0.07 | 0.12 | 0.22 | 0.71 |
| competence2 | 0.24 | 0.04 | -0.16 | 0.31 | 0.66 |
| competence4 | 0.31 | 0.46 | 0.34 | -0.30 | 0.50 |
| internal consistency (α) | 0.69 | 0.62 | 0.68 | 0.61 | 0.67 |

Lastly, Analysis of variance (ANOVA) was conducted to examine the significance of independent variables describing variations of dependent variables. For this, brand personality factor is set as independent variable and repurchase factor is set as dependent variable, and the hypotheses of this study (brand personality factors have a positive effect on customer repurchase) were analyzed.

Table V. Analysis of variance (ANOVA)

| Source | Degree of freedom | Sum of Squares | Mean Square | F value | Pr > F |
|----------------|-------------------|----------------|-------------|----------|--------|
| Research Model | 5 | 20.1541 | 4.0308 | 13.34 | <.0001 |
| Error | 131 | 39.5685 | 0.3020 | - | - |
| Overall | 136 | 59.7226 | - | R-square | 0.3375 |

The results of variance analysis are shown in Table V. The R-square of the ANOVA was 0.3375, and we can confirm that there is explanatory power of model by P value. In addition, in Table VI, when we look at the coefficient values for each brand personality factor, four variables (excitement, ruggedness, sincerity, competence) have positive (+) relationship with repurchase factor, while one (sophistication) has negative relationship with repurchase factor. In other words, in general, the higher the brand personality factor of LCC airlines, the more likely customers are to purchase LCC air tickets, while the brand personality factor of sophistication is more suitable for FSC airline than LCC.

Table VI. Analysis of hypothesis significance

| Parameter | Estimate | Standard Error | t value | Pr > t |
|----------------|----------|----------------|---------|---------|
| Intercept | 0.229 | 0.433 | 0.53 | 0.60 |
| Sincerity | 0.261 | 0.092 | 3.73 | 0.00 |
| Competence | 0.226 | 0.075 | 3.03 | 0.00 |
| Sophistication | -0.205 | 0.077 | -2.67 | 0.01 |
| Excitement | 0.330 | 0.082 | 2.82 | 0.01 |
| Ruggedness | 0.366 | 0.086 | 4.23 | <.0001 |

V. CONCLUSION

The results of this study show that brand personality of LCC airlines has a positive effect on repurchase. Also, the brand personality of LCC airlines can be expressed as the four individuality factors excluding the sophistication among the five individuality factors.

Due to the growth of LCC airlines, customers have been choosing between FSC and LCC airlines, and now they have a wider selection of LCCs to choose from.

If the route, price, and expected level of service are similar, it will be necessary to consider what the customer's selection criteria will be.

Therefore, in the future, we need to create a brand image of our own LCC airlines and have a strategy for customers to visit the airline.

REFERENCES

- [1] Jennifer L. Aaker, "Dimensions of Brand Personality," *Journal of Marketing Research*, vol. 34, pp. 347-356, 1997.
- [2] Y. K Kim, "Effect of Brand Identification on Brand Loyalty for Flight Customers: Moderating Role of Trust and Commitment," *Sciences, Korea Journal of Tourism Research*, vol. 31, pp. 309-326, 2007.
- [3] J. K. Kim, "Study for Brand Identification advertisement strategy," *Advertisement Research*, vol. 9, pp. 37~51, 1998.
- [4] Thibaut and Kelley, *Social Exchange Theory*, 1959.
- [5] M. O. Kwon, "The Effects of Brand Personality on Brand Identification, Brand Affect, and Brand Loyalty in Airline Service" *Ph. D. Dissertation*, Major of Travel, Airline & Cruise Service Management Graduate School of Tourism & Hospitality pp.185, 2013.
- [6] Gour C. Saha, and Theingi, "Service quality, satisfaction, and behavioural intentions: A study of low- cost airline carriers in Thailand", *Managing Service Quality: An International Journal*, vol. 19, pp. 350-372, 1991.