

Research on Brand Identification in the Airline Industry

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항공 산업에서의 브랜드 동일시 연구

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Abstract This study set the research model to analyze the effect of customer value on brand identification and loyalty using customers of K Airline. Based on previous researches, this study extracted variables, and built a structural equation model to examine the relationship among variables. The findings of empirical research are as follows. First, it was found that functional value and emotional value of customer value have significant effect on brand identification. Thus, hypothesis 1 was accepted. Second, customers seek emotional aspect in choosing a product or a service. That is, by using an airline brand which they think is identical with their image, value, or lifestyle, they pursue brand identification with the airline. Third, given that functional value and emotional value of customer value do not affect brand loyalty, we can know that customer value strengthens brand loyalty through brand identification. To boost brand loyalty, K Airline needs to pay attention to raise brand identification of customers with consideration of other mediating variables.

Key Words : Functional Value, Emotional Value, Customer Value, Brand Identification, Brand loyalty

요약 본 연구는 K항공사를 이용하는 고객을 대상으로 고객가치가 브랜드 동일시 및 충성도에 미치는 영향관계를 분석하고자 연구모형을 설정하였다. 이론연구의 고찰을 통해 변수를 추출하였으며 각 변수간의 관계를 살펴보기 위해 구조방정식 모형을 활용하였다. 실증분석 결과는 아래와 같다. 첫째, 고객가치 중 기능적 가치와 감성적 가치가 브랜드 동일시에 모두 유의한 영향을 미치는 것으로 나타나 가설 1은 채택되었다. 둘째, 현재의 소비자는 제품이나 서비스의 선택에 있어 감성적인 면을 더 추구한다는 것을 확인하였다. 즉 자아 이미지와 동일하거나 자신의 가치관 혹은 라이프 스타일에 일치한다고 생각하는 항공사 브랜드를 이용함으로써 항공사와의 브랜드 동일시를 추구하고 있다. 셋째, 고객가치 중 기능적 가치와 감성적 가치 모두 브랜드 충성도에 영향을 미치지 않는 것으로 나타나 고객가치는 브랜드 동일시를 통해 충성도가 강화됨을 알 수 있다. K항공은 소비자들의 브랜드 충성도를 상승시키기 위해서는 다른 매개변수의 역할도 고려되어야 하겠지만 고객의 브랜드 동일시 제고에 관심을 가져야 할 것으로 사료된다.

주제어 : 기능적 가치, 감성적 가치, 고객가치, 브랜드 동일시, 브랜드 충성도

1. Introduction

One of conspicuous characteristics of air transport

industry in Korea is emergence of low cost carrier (LCC) in around 2005. To create profits, those LCCs have expanded their routes to

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Southeast Asia. Compared with full service carrier (FSC), the kinds of airplane and flight service provided by LCCs are not very different. So, the Korean airline industry is in tough competition. Accordingly, to attract loyal customers, carriers are seeking marketing strategies differentiated from their competitors, and, to strengthen their competitiveness, trying to establish strong brands.

Meanwhile, the very concept that plays important roles in building and maintaining stable relationships between companies and customers is customer value. Customer value is the value that serves as standard in judging human behavior, and it can appear in various forms in consumption situation. The degree to which customers feel satisfied with service can vary depending on what kind of service the service provider tries to give. In particular, given that major products of the airline industry are personal, physical, and systemic ones, carriers should focus on figuring out and providing cognitive value of customers to survive in the tough competition. That is, when a customer perceives that a specific carrier brand has provided him or her with a benefit or specific value, the customer might continue to use the brand.

Value is an important concept in social science such as psychology, sociology and anthropology. Zeithaml(1988)[1], Holbrook(1996)[2], Sweeney & Soutar(2001)[3], Sheth et al(1991)[4] are among famous scholars in customer value. Many researchers have conducted many studies following the models developed by them in Korea and other countries. First, Zeithaml(1988) mentioned that, as value is a subjective concept, different customers could perceive a specific thing differently[1]. According to Zeithaml(1988), customer value is general evaluation of customer on utility of a product or service based on the customer's perception about what he or she gave and received[1]. Sheth et al(1991) did research on

wide-ranging theoretical systems of perceived value[4]. They viewed that customers perceive a product and service in various dimensions of customer value, and those dimensions influence their choices. They classified value into five dimensions: functional, social, emotional, epistemic, and conditional value.

Meanwhile, brand identification is the process that connects the image of brand user and self-concept of consumer[5]. By choosing the brand that can express oneself well, consumer wants to express and strengthen one's image using the symbol of the brand. In addition, consumer identifies the brand that represents well one's own self image, and chooses it. Hughes et al(2010), who studied the effect of brand identification stated that brand identification is the degree to which an individual can define oneself by the attributes that one believes define the brand[6].

Sirgy & Samli(1985) defined the process of linking the image of brand user and self-concept of consumer as self-congruity[7]. In the study on self-congruity with sponsorship, Sirgy et al(2008) defined self-congruity as 'the degree to which self-concept of consumer is congruous with user image on related product, the store that sells it, and sponsorship event and others[8]. In the study on brand identification and self-concept, Fournier(1998) mentioned that brand identification is the concept of self-image congruence or self-connection[9]. In the study of Sirgy et al(2008)[8], it was the concept of self-congruity, or self-image congruence. Usakli & Baloglu(2011) argued that self-image congruence is identical with self-concept[10].

Therefore, above researches prove that brand Identification, self-image congruence, self-connection, self-congruity, and self-image congruence are all a similar concept. So, this research intends to use all the above concepts as the concept of brand identification.

Given the importance of brand loyalty, there

have been many researches in Korea and other countries on variables affecting brand loyalty. Mutual effects among customer value, brand identification, and brand loyalty are as follows. Bitner(1992) found out that empirical value is very closely related with emotional response of customer[11]. Chaudhuri & Holbrook (2001) proved that empirical value composed of practical value and pleasure value affects brand emotion[12]. Rio et al(2001) discovered that the more consumer feels self-confidence and sense of belonging by procuring a product, the more deeply he or she has relationship with it, and the more he or she prefers it[13].

Kang et al(2008) showed that in general openly consumed products are affected by ideal self-image congruence, and that individually consumed products are more affected by practical self-image[14]. They discovered that ideal self-image congruence affects customer's intention to maintain the loyalty more strongly than practical self-image congruence.

In the research on sports event and self-congruence, Sirgy et al(2008)[8] revealed that, particularly in the cases where customer knows well the company sponsoring the event, self-congruence has positive effect on brand loyalty. In their research on brand loyalty among American college students, self-identification with brand has positive effects on social identification and brand loyalty[15]. Thus, we can figure out that the more one identifies with a certain brand, the more one recommends it to others, and with emotional closeness with it, the more he or she is likely to use it. Ryu et al(2007) showed that perceived value of customers has significant effect on willingness to act like revisit or positive word of mouth[16], and Parasuraman & Grewal(2000) discovered that perceived value has important effect on customer loyalty[17]. According to Tsai et al[18], the more highly customer perceives the value of a product or service, the more loyal he or she is to the brand.

Caruana & Ewing(2010) also identified that perceived value has direct effect on brand loyalty[19]. Based on the above researches, this study set the hypotheses on customer value, brand identification, and brand loyalty.

Hypothesis 1-1: Functional value will have significant effect on brand identification.

Hypothesis 1-2: Emotional value will have significant effect on brand identification.

Hypothesis 2: Brand identification will affect brand loyalty.

Hypothesis 3-1: Functional value will have significant effect on brand loyalty.

Hypothesis 3-2: Emotional value will have significant effect on brand loyalty.

Initial researches related with brand identification were mainly on self-identification with product brands. However, as economic structure has shifted from manufacturing industry to service industry, we have to focus on brand related research in service industry. In particular, research on enhancing brand loyalty through the relationship between customer value and brand identification in the context of aviation service is insufficient. Therefore, this study intends to expand brand research into service industry.

2. Materials and Methods

This study is on brand identification with airlines. Pilot study proved that to be qualified for brand identification research, one should use the airline at least 3 times a year (One should use other airline one time or never.) Survey data were collected for 3 days from October 18 to 21, 2018 to customers of K Airline waiting for flights in Incheon International Airport and Gimpo Airport. Respondents were asked to fill out blanks of the questionnaire. The survey was performed by 6 surveyors trained for such a survey method. Among 200 copies of the questionnaire distributed, 177 were collected.

Excluding 12 copies where respondents were found to have used the airline less than 3 times and respondents did not answer questions sincerely, 165 copies were finally used for analysis.

Major analyses to test research hypotheses were as follows. First, to examine demographic characteristics of respondents and their patterns of using the airline, frequency analysis was done. Second, to examine consistency among questions on customer value, brand identification, and brand loyalty, this study did reliability test using Cronbach's alpha coefficient and tested validity through confirmatory factor analysis (CFA). Third, to secure discriminant validity, this study did correlation analysis to examine correlations among composing concepts. Forth, to test hypotheses, this study used structural equation modeling (SEM). To analyze data, SPSS 22.0 and AMOS 21.0 were used.

3. Empirical Analysis

3.1 Demographic characteristics

As shown in Table 1, the demographic characteristics of respondents are as follows. There were 100 women (60.6%) and 65 men (39.4%). The age group was 92 (55.7%) in their 20s, 43 (26.1%) in their 30s, and 30(26.1%) in their 40s and above, with 20s and 30s accounting for more than 80%. Academic background was composed of 7 high school graduates (4.2%), 53 college graduates (32.2%), 87 college graduates (52.7%), 87 undergraduate students (52.7%), 18 graduate students (10.9%). Therefore, college graduates were the most. In the occupation, 82 employees (49.6%), 34 civil servants (20.6%), 22 professional workers (13.3%), 17 housewives (10.2%), 10 others (6.0%) The office workers accounted for the highest percentage.

Table 1. Demographic characteristics

	Distinction	Frequency	%
Gender	female	100	60.6
	male	65	39.4
Age	20-29	92	55.7
	30-39	43	26.1
	40 and above	30	18.2
Education	High school	7	4.2
	college graduates	53	32.2
	Undergraduate school	87	52.7
	Graduates	18	10.9
Occupation	Office worker	82	49.6
	Civil servant	34	20.6
	Professional	22	13.3
	Housewife	17	10.2
	Others	10	6.0
Total		165	100

3.2 Reliability and Validity of Variables

Based on previous researches, this study set the relationships among variables, and, to test reliability and validity among them, did confirmatory factor analysis (CFA) as shown in Table 2. When χ^2 (chi-square)is significance level $p>0.05$, the population data is judged to be suitable[20].

After choosing measurement items and making them to be elaborate, reliability test was done using construct reliability. As shown in Table 2, all the construct reliabilities were over 0.8, proving high reliabilities. Through CFA, this study eliminated items undermining convergent validity. Indices of goodness of fit are as follows: $\chi^2=647.204$ (df=223, $p=0.000$), RMR=0.020, GFI=0.899, AGFI=0.849, NFI=0.909, IFI=0.906, and CFI=0.925. GFI of CFA offers GFI after eliminating items undermining validity. The results can be acceptable except for χ^2 , which is sensitive to the size of sample.

All the standardized factor loading values connecting measurement items and related factor are over 0.5. AVE (average variance extracted) which shows the amount variance is explained by research units is also over 0.5. t value is over ± 1.96 , critical value for acceptance, proving convergent validity of measurement items.

Table 2. Confirmatory Factor Analysis for the measurement model

Factor	Measurement Category	Std. Factor loading	t Value	SMC
Functional Value	FV 1	.807	---	.669
	FV 2	.844	13.177**	.725
	FV 3	.879	11.222**	.744
	FV 4	.748	11.190**	.888
Emotional Value	EV	.704	---	.709
	EV	.612	10.228**	.711
	EV	.698	11.728**	.512
	EV	.789	10.934**	.887
Brand Identification	BI	.700	---	.468
	BI	.714	13.004**	.669
	BI	.731	14.447**	.722
	BI	.777	13.445**	.668
Brand loyalty	BL	.665	---	.578
	BL	.787	11.923**	.569
	BL	.844	14.772**	.772
$\chi^2=647.204(df=223,p=0.000)$, RMR=0.020, GFI=0.899, AGFI=0.849, NFI=0.909, IFI=0.906, CFI=0.925, **:P<.01				
AVE: Functional Value 0.556, Emotional Value 0.596, Brand Identification 0.677, Brand loyalty 0.734				
Construct reliability: Functional Value 0.956, Emotional Value 0.882, Brand Identification 0.867, Brand loyalty 0.904				

Table 3. Correlation Matrix

	Functional Value	Emotional Value	Brand Identification	Brand Loyalty
Functional Value	.745			
Emotional Value	.331	.772		
Brand Identification	.215	.221	.822	
Brand loyalty	.307	.315	.271	.839

all correlations are significant at $p(0.01(2\text{-tailed}))$, diagonal value: square root AVE

Discriminant validity means that variables measuring different concepts should not be closely related. To secure discriminant validity, this study used AVE (average variance extracted) which is a measure of the amount of variance that is captured by a construct in relation to the amount of variance due to measurement error. Accordingly, to secure discriminant validity, this study compared AVE values of research units and correlation coefficients. If AVE value between two factors is larger than coefficient of determination, square of correlation coefficient, there is discriminant validity between two factors[21]. As shown in Table 3, discriminant

validity is secured.

3.3 Analyzing Structural Equation Model

Testing the overall model showed the following results: $\chi^2=439.919$, $p=0.000$, GFI=0.897, AGFI=0.859, NFI=0.890, and RMR=0.023. Compared with commonly used evaluation indicators of covariance model, the findings of this model can be judged as proper. $\chi^2(131)=3.358$ is also very proper. Path coefficients of the model are shown in Table 4.

Hypothesis 1-1 which assumes that functional value of customer value will have significant effect on brand identification was accepted,

because path coefficient is 0.481 ($t=7.771$) where t value satisfies the requirement of $t \geq 1.96$. Hypothesis 1-2 which assumes that emotional value of customer value will have significant effect on brand identification was accepted, because path coefficient is 0.377 ($t=3.807$). Second, hypothesis 2 which assumes that brand identification will have significant effect on brand loyalty was accepted, because path coefficient is 0.253 ($t=2.792$). Third, hypothesis 3 which assumes that functional value and emotional value of customer value will have significant effect on brand loyalty was rejected, because the two coefficients are -0.123 ($t=0.332$), and 0.221 ($t=0.598$).

Table 4. Structure model path analysis

H	Path	Estimate	S.E	C.R	p value
1-1	Functional Value --> Brand Identification	.481	.012	7.771**	.000
1-2	Emotional Value --> Brand Identification	.377	.020	3.807**	.000
2	Brand Identification --> Brand loyalty	.253	.023	2.792**	.000
3-1	Functional Value --> Brand loyalty	-.123	.021	0.332	.541
3-2	Emotional Value --> Brand loyalty	.221	.022	0.598	.410

*: t -statistic (≥ 1.96) sig. level of $p(0.05)$

4. Conclusion

This study set the research model to analyze the effect of customer value on brand identification and loyalty using customers of K Airline. Based on previous researches, this study extracted variables, and built a structural equation model to examine the relationship among variables. The findings of empirical research are as follows.

First, it was found that functional value and emotional value of customer value have

significant effect on brand identification. Thus, hypothesis 1 was accepted. It means that the more customers feel that they are given high value compared with the cost, time, and efforts they invest, the higher their brand identification gets. The more customers of K Airline feel that they have received good benefits from the airline, the more they feel that the airline fits their lifestyle, value, or image. That is, through the satisfaction of values they consider as important, people establish relationship with a certain brand, and, by using, an airline that they assume is identical with their self-images, they want to express themselves. Such a finding is the same as the findings of NCSI (National Customer Satisfaction Index) performed in 2018. In particular, its new services like web check-in and Flying Mom service for children flying alone where they are delivered to their parents with letters were highly evaluated by customers. Needs and desires of customers diversify and change.

Currently, K Airline allows customers for domestic flight to check in, and choose seats using smart phone app, and, using the bar code generated after check-in, customers can get printouts of boarding pass from unmanned boarding machine. Such diverse one-stop service functions using mobile devices can become common when potential customers become loyal customers with spread of iPhone.

It is an example where a company grasps customer desires and satisfies the values they consider as important. Customer builds the relationship with a brand through satisfaction of his or her desire. Accordingly, airline needs to search for values customers consider important to boost its customer recognition value. As customers using different routes can have different preferences, airline should provide specific services suitable to different flight routes, which can boost brand identification of customers. In addition, through the systemic procedure in the airline, it needs to continue to

investigate what customers need, and, after giving specific services, it needs to get feedback of them to give differentiated services to different routes, which can lead to quantitative and qualitative growth of the airline.

Second, customers seek emotional aspect in choosing a product of a service. That is, by using an airline brand, which they think is identical with their image, value, or lifestyle, they pursue brand identification with the airline. Therefore, K Airline needs to strengthen its unique image through sponsorship of events closely related with the characteristics of its brand as well as advertisement. It is important to offer emotional charm, which can make customers affectionate with the brand.

Third, given that functional value and emotional value of customer value do not affect brand loyalty, we can know that customer value strengthens brand loyalty through brand identification. To boost brand loyalty, K Airline needs to pay attention to raise brand identification of customers with consideration of other mediating variables.

Many airlines are aware of importance of customer-brand relationship and make efforts to build close relationships with customers. In particular, Asiana Airline has tried Happy Mom service, Free Mom service, and in-flight services like child service and magic show, which received Mercury Award. Customers evaluated them positively. During last winter vacation, Asiana Airline crew members belonging to the Asiana Magic Team taught children magic through 'Asiana Magic School', which attracted explosive responses from children. Customers always have opportunities to choose other brands.

Thus, it implies that it is necessary for an airline to benchmark successful programs of other airlines. In addition, apply them to its purpose, and develop its own unique programs. Building of such a close relationship with customers will boost consumer-brand relationship. By expanding

product-oriented brand identification and consumer-brand relationship to service industry, in particular, airline service industry, this study provided important theoretical data for researches on brands in service industry.

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