ANALYZING THE CASE OF VIETJET AIR TO ASSESS THE VIETNAMESE CUSTOMERS' AIRLINE BRAND EQUITY: AN EMPIRICAL RESEARCH STUDY

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ABSTRACT. From the recent marketing incidents of a typical airline company, this research study would like to analyze the sources and consequences of Airline's Consumer Brand Equity by using Vietjet Air Vietnam as an example. To this end, we developed an empirical study based on the Chen & Tseng [5] Brand Equity airline model in Taiwan, using structural equation modeling (SEM) to investigate the interrelationship between the dimensions of the components of brand equity in the airline industry and how they directly affect brand equity. With 307 valid respondents, the questionnaire was designed to include 3 age groups: 18-25, 26-35, 36-50 and older than 50 years. The participants from some universities and some firms in Ho Chi Minh City involved in conducting the survey. The findings suggest that Brand Equity factors in their interrelationships have a positive effect. In addition, Brand Image is a direct factor that has the most influence on airline brand equity, following perceived dimensions of quality and brand loyalty. This research also has relevant implications for Vietjet marketing managers, who should reinforce their brand equity in the future to attract more customers.

1. INTRODUCTION

VietJet Aviation Joint Stock Company (VietJet Air or Vietjet) known as an airline with cheap faresin Vietnam, it was established as the first privately owned airline. They started offering domestic service in Vietnam since December 2011 such as civil domestic flights. In

which, Sovico Holdings, HDBank, other organizational investors and individual stakeholders are the owners of VietJet Air. By the end of 2018, VietJet operated 105 routes including 39 domestic and 66 international routes.

VietJet was using ticket discount strategy to attract customers andexpand their marketing system. First, they sold tickets with 0 VND or low-priced tickets for empty seats, those tickets weresold before a few weeks to improve the flight occupancy rate. This strategy will create word-of-mouth marketing effects through advertising and customer experiences. Besides, low-priced tickets were also attracting potential customers who had the first time to experience airplane and customers who was using FSCs (Low-priced tickets of VietJet may be cheaper than FSCs' ticket price up to 60%).

In short, VietJet is the low-cost airline; their strategies focus on customers from middle-income class or first-time experience flying. They are usually found young and dynamic, and especially expert in utilizing technological equipment such as smartphones, laptops, etc. VietJet's report presentation on September 2018 shown that customers from 20 to 34 years oldaccounted for 25.9%, they are main consumers of VietJet's tickets.

After the achievement of the 2018 Asian U23 final in Changzhou City, China, VietJet Air organized a bikini performance on VJ7268 flight to welcome Coach Park Hang-Seo and Vietnam U23 team to return to the country on January 28th2018. However, this activity received a fierce protest from fans all over the country because they thought that bikini models were too offensive. Most people think that sexiness and glamour need to be put in the right context with the right level. Especially when using a sexy idea, which is considered a double-edged sword, must be applied very carefully.

With images contrary to the acceptance of Vietnamese people from the use of bikini models in anoffensive way, VietJet's brand equity have been negatively affected, especially is brand image. Consumers think they will be loyal to the airline based on strong brand image ([39]; [25]; [27]; [41]).

In VietJet's prospectus, they show that they have many unique risks, one of them is risk of accidents and incidents. Like other airlines, this kind of risk can make VietJet bear some potential losses such as property damage, unexploited aircraft, and affection of the company's image. In addtion, any such event will significantly increase the costs associated with passenger

compensation, repair and replacement of damaged. Moreover, any aircraft accident, even if the passenger is fully insured, will greatly affect the positive identification of brand equity of the customers.

Accordingly, this research is to investigate an VietJet Air's customer-based brand equity including four dimensions: brand awareness, brand loyalty, brand image, and perceived quality. Furthermore, this research also tries to discover relationships among those dimensions and their direct effects on overall brand equity.

To investigate this study, some goals need to be achieved as follow:

Identify the brand equity dimensions of Vietjet from the customer's perspective

Evaluate the inter-relationships between those dimensions of brand equity

Significance of dimensions have direct effects on overall brand equity

Suggest recommendations to improve Vietjet brand equity

In order to reach those research objectives, research questions should be asked:

What is the view of brand equity from customer's perspective?

What is the influence among brand awareness, brand loyalty, brand image, and perceived quality?

What is the most important dimension affecting directly on overall brand equity?

Are there any aspects that VietJet Air needs to be improved brand equity?

2. LITERATURE REVIEW

2.1. Airline Classification

Leick and Wensveen [13] showed four basic types of airline today. The airlines dependence on what kind of strategy they are aiming for, they will choose for themselves the most suitable type of aviation. These include:

Full – Service Carriers (FSCs)

Low – Cost Carriers (LCCs)

Regional Carriers (RCs)

Charter Carriers (CCs)

In Vietnam's aviation domestic market, there are two popular airlines – VietJet Air and Vietnam Airlines – they account for almost the entire domestic market share. Each airline presents for two kind of different business model, VietJet is the LCCs model and Vietnam

Airlines is the FSCs model. Thus, the author just concentrates on giving clearly about these two type models, especially VietJet with Low-Cost Carriers.

Full – Service Carriers: In spite of the fact that airline models are getting more and more modern, the full-service carrier with traditional network still delivers regular flight-service to many destinations and offers a number of ancillary services such as additional drinks, entertainment on flights, lounges at airport, and designated seats Gillen [8]; Huschelrath and Muller [9]. In actuality, the full-service carrier sets the goal to become the air transport contributor with one-way for the communities that they are serving like supplying vacation by airplane to any destination for travelers (usually having cooperated with international airlines).

Low – Cost Carriers: Focusing on no-frills and point to point service is a recently replacement model for FSCs by low-cost carrier model. Like the full-service carrier model, not all low-cost carriers are the same. Nevertheless, the most successful of this model has been using as a popular cost reduction strategy. Some of the cost factors from production functions are removed by this strategy and it also lessens the level of the remaining costs Kenneth [2; 10]. Similarly, low-cost airlines could offer more limited services and from that, they can charge separately for the extra services.

2.2 *The dimensions of Brand Equity & Research Model*

According to Chen & Tseng [5] model in customer-based airline brand equity, this section provides a description of this model made up of four dimensions: brand awareness, brand image, perceived quality, and brand loyalty.

a) Brand Awareness

Brand awareness relates to brand recognition and recall ability of consumers to the brand ([6]; [20]; [42]). Brand recognition requires consumers to distinguish brands correctly when looking or hearing about them. The ability to recall brands requires consumers to recall the brand from their memory ([19]; [23]). In fact, the level of brand awareness is certain associations in consumers' minds such as brand names, logos, or images that are visible to the eyes ([21]; [22])

Many studies suggest that the perceived quality will increase with the increase of brand awareness ([28]; [38]; [44]; [49]). Nguyen [16] proposed that the quality of consumers' assessment is higher when brand awareness is in a high-level. The following hypothesis that based on those is proposed in this study:

H1: Brand awareness has a positive effect on perceived quality

H2: Brand awareness has a positive effect on brand image

b) Perceived Quality

Zeithaml (1998) expounded the perceived quality is the subjective perception of consumers about outstanding advantages, not the quality of the product.For the service industry, the perceived quality is consumers' impression to the organization's performance [31]. Motameni & Shahrokhi [15] and Yoo et al. [48] have noticed that brand equity and perceived quality have a positive relationship with each other. In brand equity measurement, Aaker [1] started that perceived quality is one of the core components.

The perceived quality is considered as the main premise of brand loyalty [3]. Influence on brand image by perceived quality was presented by Nguyen & Nguyen [26]; Nguyen & Tran [24] and Chen & Tseng [5]. The following hypothesis that based on those is proposed in this study:

H3: Perceived quality has a positive effect on brand image

H4: Perceived quality has a positive effect on brand loyalty

H5: Perceived quality has a positive effect on brand equity

c) Brand Image

According to Keller [11] brand images were defined as consumer perceptions reflected by brand associations in their minds. Some associations are clearly show the abstract conceptual nature of brand image such as a client's association with business image through prestige, trust, morality or corporate social responsibility is invisible evaluations of brand image [47]. The brand image of airlines is an important factor to assess the overall business as well as the services of the business [30]. In addition, it affects consumer choice of services ([45]; [17]; [31]).These demonstrates are better methods to improve the brand image of airline, the more likely customers will go on with using its services in the future and may endow with attraction for others to choose this airline.

When building brand equity, brand image often appears as a sufficient step instead of brand awareness ([14]; [35]; [34]; [36]; [37]; [33]). Moreover, Pham et al. [14] proved that brand equity is controlled by brand image.

Brand image has been detected to have a supportive impact on brand loyalty ([34]; [37]). The following hypothesis that based on those is proposed in this study:

H6: Brand image has a positive effect on brand loyalty

H7: Brand image has a positive effect on brand equity

d)Brand loyalty

Bloemer and Kasper [4] defined brand loyalty as "a situation which reflects how likely a customer will be to switch to another brand, especially when that brand makes a change, either in price or in product features". Brand loyalty refers to the tendency of consumers' loyalty to the brand and it is expressed by the intention of choosing to buy the product brand primarily. This proves that brand loyalty results from consumer satisfaction in their perception of a high-quality product ([48]). Consumer's satisfaction with an airline service will make them continue to choose this airline for the next time and most likely recommend it to others [31].

Unlike non-loyal customers, loyal customers are less likely to switch brands that they trust; they also repurchase and stick more on their favorite brands ([32]). Therefore, brand equity will be affected directly and positively by brand loyalty ([18]).The following hypothesis that based on those is proposed in this study:

H8: Brand loyalty has a positive effect on brand equity
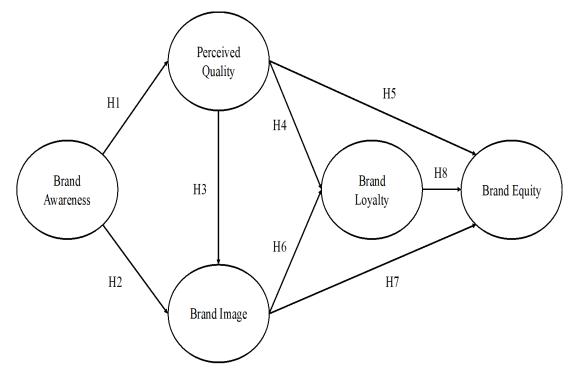
2.3 Research model

Figure 1: Research Model of Branding Process.

3. RESEARCH METHODOLOGY

This study will use questionnaires from the survey as a tool. The quantitative method will be an approach to research and information gathering. Survey research was selected because it provided a fast, effective and accurate means to evaluate population information.

A) Sampling

Target population: People who have experienced VietJet Air's flight.

Sampling method: By two main methods: Online survey (Email, Facebook, etc.) and Offline survey

Sampling pool and criteria: Being at least 18 years old and Having experience of VietJet's flight; Studying and working at Ho Chi Minh City and Sample size: The sample size of this research is supposed to be around 300 respondents.

B) Questionnaire Structure

Mr. Nguyen Tran Tuan has conducted a research named "Researching brand value components of VietJet airline: Approached from the perspective of Vietnamese consumers" in 2017. The author decided to use Nguyen's measurement scale because of a similarity among the elements in the research models of both.There are three main parts of questionnaire:

Part 1: General question that is concerned about the experience of using Vietjet' flight

Part 2: Further detailed of survey. A Likert-Scale of 5 points is applied to evaluate the question for both dependent and independent variables. "The Likert scale, developed by Rensis Likert, is the most frequently used variation of the summated rating scale". The Likert range in this study would be:

1 = Strongly disagree

2 = Disagree

3 = Neutral

4 = Agree

5 = Strongly agree

Part 3: Respondents' demographics about socio-demographic and economic variables

4.   RESEARCH FINDINGS

4.1 Response rate

The number 355 surveys were collected online (292 respondents) as well as offline (63 respondents). There are 17.7% of offline and 82.3% of online survey were distributed through email, Facebook, Zalo. Each questionnaire was answered by an experienced VietJet's flight service customers. Finally, due to some uncommitted and missing responses, only 307 surveys are qualified and valid among 355 returned surveys. Consequently, the response rate is around 86%. Based on these valid responses, this research will also be carried out.
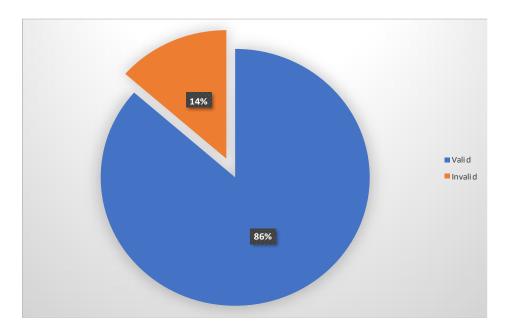

Figure 2: Response rate

4.2   Descriptive statistics

Descriptive statistics are used to summarize and describe the basic features of the data this study. It creates the general observation about data collected. In this part, the sample size of 307 respondents is taken to make the overall descriptive observation about the impact of brand awareness, brand association, perceived quality and brand loyalty on consumer-based brand equity. The table of descriptive statistics includes Maximum, Minimum, Mean and Standard Deviation of 27 items.

Table 1: Descriptive statistics

Factor	Maximum Mean	Minimum Mean
Brand Awareness (AW)	AW3 (3.93)	AW1 (3.77)
Perceived Quality (PQ)	PQ9 (3.57)	PQ5 (3.13)
Brand Image (BI)	BI5 (3.63)	BI4 (3.42)
Brand Loyalty (LO)	LO4 (3.57)	LO2, LO3, LO5 (3.44)
Brand Equity (BE)	BE3 (3.50)	BE2 (3.46)

4.3   *Reliability Test*

According to George and Mallery [7], the Cronbach's Alpha indexes are represented as the following rule:

Excellent: Alpha > 0.9

Good: Alpha >0.8

Acceptable: Alpha > 0.7

Questionable: Alpha > 0.6

Poor: Alpha > 0.5

Unacceptable: Alpha < 0.5

In addition, if the "Cronbach's Alpha if Item Deleted" is larger than the Cronbach's Alpha overall and the "Corrected Item-Total Correlation" is less than 0.3, the item will be removed from the list of variables.

In this part, only two components – Perceived Quality and Brand Loyalty – have the elimination items due to the "Corrected Item-Total Correlation" is less than 0.3. They include PQ8 (0.289), PQ9 (0.136), and LO5 (0.108). Others are meet with the conditional requirements above. After eliminating those unsatisfied items, the reliability statistics are showed in the table below.

Table 2: Reliability statistics

Factor	Cronbach's Alpha	N of items
Brand Awareness	0.864	4
Perceived Quality	0.869	7
Brand Image	0.778	5
Brand Loyalty	0.811	4
Brand Equity	0.854	4

4.4 Exploratory factor analysis (EFA)

The final result of the Exploratory Factor Analysis process is presented as below after removing the unsatisfactory items.

Table 3: KMO and Barlett's Test of final round - EFA

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.800
Bartlett's Test of Sphericity	Approx. Chi-Square	2306.571
	df	171
	Sig.	.000

Table 4: Total Variance Explained of final round – EFA

Factor	Initial Eigenvalues		Extraction Sums of Squared Loadings	
	Total	Cumulative %	Total	Cumulative %
1	4.472	23.537	4.038	21.253
2	2.606	37.252	2.207	32.871
3	2.287	49.287	1.861	42.666
4	1.871	59.133	1.409	50.079
5	1.658	67.858	1.204	56.414

Table 5: Pattern Matrix of final round – EFA

	Factor				
	1	2	3	4	5
PQ2	767				
PQ6	745				
PQ4	713				
PQ5	701				
PQ1	678				
AW4		795			
AW3		784			
AW1		782			
AW2		774			
BE3			841		
BE4			763		
BE1			744		
BE2			734		
BI1				770	
BI3				756	
BI2				682	
LO2					746
LO3					725
LO1					679

Extraction Method: Principal Axis Factoring.

Rotation Method: Promax with Kaiser Normalization.

a. Rotation converged in 5 iterations.

According to the results, the value of 0.8 KMO (> 0.5) and the Bartlett's significant test (Sig.=.000 < 0.05) fulfill the condition required. Moreover, 61.2% of "Cumulative % of Extraction Sums of Squared Loadings" shows that these final factors account for 61.2% of the variance in data. Variable loads ranging from 0.678 to 0.841 (greater than 0.5) are satisfactory. The criterion for the EFA analysis is thus guaranteed by these 19 observed variables.
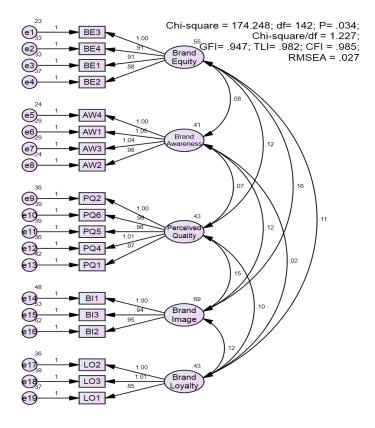
4.5 Confirmatory factor analysis

Figure 3: Standardized measurement modeling

The CFA results show that CMIN / df= 1.227 (< 3), GFI=0.947 (> 0.9), TLI=0.982 (> 0.9), CFI=0.985 (> 0.9), AGFI= 0.928 (> 0.8), RMSEA=0.027 (< 0.08) and PCLOSE=0.999 (> 0.05). Consequently, this result, which is considered to be satisfactory, shows that the measurement model is fit with survey data.

Moreover, Standardized Regression Weights and Regression Weights show that all weights are higher than 0.5 and have statistically significant due to 0.000 P-value (<0.05). The measurement model therefore meets the standard of convergent validity based on the acceptable result of Standardized Regression Weights.

In addition, for each factor, the Composite Reliability (CR) and Average Variance Extracted (AVE) are calculated to assess the precise fit of the measurement model. Microsoft Excel 2019 programming has been utilized in this progression to physically compute CR and AVE.

Table 6: Composite Reliability (CR) and Average Variance Extracted (AVE)

Factor	CR	AVE
BE	0.855	0.596
AW	0.864	0.614
PQ	0.844	0.52
BI	0.781	0.543
LO	0.759	0.512

The measurement model is significant if the composite reliability (CR) of all factors is higher than 0.7 and the Average Extracted Variance (AVE) is higher than 0.5. According to Table 6, all composite reliability and average extracted variance indexes meet the conditions. Therefore; reliability and convergent validity are sufficient for all factors in the measurement model. Figure 3 shows the final outcome of the CFA.

4.6 Structural Equation Modeling (SEM)

Structural Equation Modeling (SEM) was used to test in a research model the hypothesized causal relationships. The criteria for examining whether SEM fits data are similar to CFA's measuring model criteria: Chi-square / df < 3, CFI > 0.9, GFI > 0.9, TLI > 0.9, AGFI > 0.8, PCLOSE > 0.05 and RMSEA < 0.08.
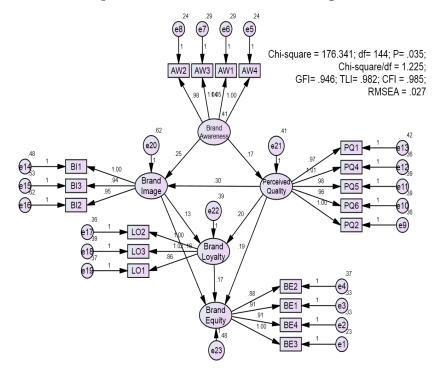
The result is presented as below after conducting SEM:

Figure 4: Structural Equation Modeling (SEM)

From Figure 4, all measurement values are met with the Chi-square / df= 1.225 (< 2), GFI=0.946 ((> 0.9), TLI=0.982 (> 0.9),AGFI=0.929 (> 0.8), CFI=0.985 (> 0.9) and RMSEA=0.027 (< 0.08) criteria. This result, reaches the highest level of satisfaction with the standard model fit criteria.

Table 7: Conclusion of Research Hypothesis

	Hypothesis	Estimate	P-value	Hypothesis Test
H1	Brand Awareness has a positive effect on Perceived Quality	0.170	.012	Accepted
H2	Brand Awareness has a positive effect on Brand Image	0.192	.006	Accepted
H3	Perceived Quality has a positive effect on Brand Image	0.235	***	Accepted
H4	Brand Image has a positive effect on Brand Loyalty	0.163	.034	Accepted
H5	Perceived Quality has a positive effect on Brand Loyalty	0.200	.008	Accepted
H6	Brand Image has a positive effect on Brand Equity	0.185	.010	Accepted
H7	Perceived Quality has a positive effect on Brand Equity	0.171	.015	Accepted
H8	Brand Loyalty has a positive effect on Brand Equity	0.147	.042	Accepted

5. DISCUSSION, IMPLICATION, AND RECOMMENDATIONS

5.1 Discussion

Based on the research results, there exists a positive relationship among the components of Brand Equity including Brand Awareness, Perceived Quality, Brand Image, and Brand Loyalty, which corresponding to H1, H2, H3, H4, H5 hypotheses. Thus, for factors that are closely related to each other, when we improve the independence factor, then at the same time we will improve the dependency factor. For example, when we propose good solutions to

improve Brand Awareness, then Vietjet's Brand Image and Perceived Quality can also be improved in addition to the individual solutions of each one. Specifically:

For Brand Awareness, it is significant because it helps customers make decision in their choices of certain airlines. In other words, if a certain airline is not known to customers when they are searching for a certain airline, then choosing this airline is very unlikely for them Chen & Tseng (2010). This is consistent with Konecnik and Gartner [12], by which Brand Equity could not be created without Brand Awareness; even it does not have a direct effect on Brand Equity. VietJet Airlines is therefore advised to carefully examine their brand communication strategy in order to help maintain customer recognition of the brand name of an airline compared to its competitors.

For Perceived Quality, this result conforms to the research model of Park, Robertson and Wu [31]; Park [20]; Yoo & Donthu [48]; Nguyen & Tran [20]; Chen and Tseng [5]. This means consumers who appreciate the high-quality service provided by VietJet Air will love VietJet Air rather than other airlines and intend to choose it.So, marketing managers should focus their efforts primarily on perceived quality that will positively contribute to customers' brand loyalty. According to Wang, et al. [46], passenger recognition of airline companies' quality of service depend soninternal flight cabin decoration and cleanliness, comfortable seats, ticket prices, schedules, on-time flights, and flight safety. Thus, the ways to improve perceived quality are: VietJet airline needs to provide accurate operating procedures and professionalism throughout the entire service process to enable passengers to enjoy comfortable and convenient flight service quality.

For Brand Image, by the similarity between the results of this study and Chen & Tseng [5], it shows that consumers are impressed and relate easily from their minds to the brand image of VietJet Air, thereby increasing their popularity and affecting the choice of Vietjet Air instead of the other airlines, thus increasing VietJet Air's brand equity. Nguyen [18] recommended that brand image is very important, so we need to raise awareness of advertising, brand awareness and brand association through marketing activities.

For Brand Loyalty, the findings follow the research models of Chen & Tseng [5]. This means consumers will have a tendency in the future to choose Vietjet Air more if they are loyal to VietJet Air service. There are some ways to build brand loyalty of customers: making

impressive to customers through in-flight reward programs for food and beverage, or in holiday seasons, VietJet could offer rewards and flash deals to catch customers' attention. As a result, they keep customers loyal.

Based on the results of the study, we can conclude that the incident with VietJet flights in 2018 will not affect the continued use of this airline's flight service if VietJet can guarantee the satisfaction of brand equity elements including Brand Awareness, Brand Image, Perceived Quality, and Brand Loyalty. Besides, the solutions for each component will be discussed further.

5.2 Recommendation for limitation

Regardless of the huge commitment made by the present investigation in the Brand Equity area, trying to duplicate this examination for development, a few components of the present investigation ought to be considered.

First, the specific area where the research was conducted should be pointed out as the main limitation of this research. The findings rely only on data collected with 355Vietnamese respondents in Ho Chi Minh City so that the conclusions can not be generalized broadly for this reason. In fact, VietJet Air not only has domestic flights but also international flights. Thus, the generality will be higher if the survey is on foreign consumers.In addition, most respondents are between the ages of 18 - 25 and are currently university students. So as to sum up the goal results, future research ought to differentiate the objective populace with various statistic foundations. Besides, this investigation centers exclusively around quantitative technique. Future research would in this manner be prescribed to join both quantitative and subjective strategies so as to investigate all parts of research.

Next, the research focused mainly on the three-dimensional direct effects on brand equity. From the customer's point of view, there are some factors that affect Brand Equity indirectly. The nation of birthplace, for instance, demonstrates the positive and huge effect through its measurements on consumer-based Brand Equity ([20]; [26] [43]) are different variables influencing Brand Equity. In this manner, so as to improve the proposed brand value model, the following exploration would address these fascinating elements of Brand Equity.

Finally, the research topic focuses only on researching brand equity components approaching customer-based brand equity of VietJet Airline only. That's why the next research

direction is to expand to bigger section, Vietnam aviation industry. From that, people can observe correctly the overall needs and demands of consumers in flight service.

Conflicts of Interest: The author(s) declare that there are no conflicts of interest regarding the publication of this paper.

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