1st International Conference on Aviation Future: Challenge and Solution (AFCS 2020)

Intention To Buy Air Ticket Online Of Vietnamese Consumers

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Abstract

The study aimed to identify and measure the factors affecting the intention to buy air ticket online in Vietnam by surveying 331 consumers aged 18 and over who bought air ticket online. The SPSS 20 tool was used to analyze the reliability of the scale through the Cronbach's Alpha coefficient, EFA exploratory factor analysis, and linear regression analysis.

Research results show that positive impact factors, decreasing by their strength, include: Perceived Benefit, Reliability, Reputation, Subjective Norm, Perceived Ease of Use. Meanwhile, Perceived Risk has a negative impact on the intention to buy air ticket of consumers. The results also help managers recognize the importance of the factors that affect the buying behavior of the consumers, and consequently make appropriate strategic adjustments and actions in the competitive process for air ticket online presently.

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Peer-review under responsibility of the scientific committee of the 1st International Conference on Aviation Future: Challenge and Solution

Keywords: air ticket online, Vietnamese consumers, purchase intention

1. Introduction

According to the report on Internet by the end 2019, with 59.2 million Internet users (and estimated growing up to 75.7 in 2023), Vietnam is rated the first in the number of Internet users among other countries in South East Asia. Therefore, it can be seen that online shopping decisions are increasingly common in both tangible and intangible services. The launch of a series of low cost airlines from home and abroad leads to fierce competition and the beneficiaries are none other than customers. Passengers have a choice of more diverse flights, time, types, booking and payment methods, ... In which, ticket booking method greatly influences the decision to buy tickets by the customer, because this is the first step to show the convenience that airlines bring to customers. Airlines provide customers with a variety of ticketing options such as: directly at their representative offices, agents, ticket offices, hotline, online, etc. The most common form is online booking, for the benefits it offers to customers such as: fast, convenient, anytime, anywhere, providing complete information that customers need from flight details to the seat,

promotion, fare, payment, contact support, etc. Just sitting at home but a customer still has a complete picture of the flight that the customer want, then makes the decision on whether to buy the service or not.

Vietnam is the market that most rapidly captures the economic trends, the trade flows in the world. The majority of the young population, with access to high-tech information and the shopping need is at the top of the country. Studying the buying behavior of customers in Vietnam can provide managers with a clear idea of what strategies to focus on, and what issues to focus on to improve consumer behavior, and create the habit of buying tickets for the target group of customers. Therefore, studying the factors affecting the decision to buy tickets online of consumers in Vietnam is very necessary.

2. Literature review and research model

2.1. Main concepts

Online shopping is a transaction made by the consumer through a computer-based interface, a smartphone, etc, of consumer which is connected and interacts with the retailer's digital store through a computer network (Haubl & Trifts, 2000). Purchase intentions can be used to test the implementation of a new distribution channel to help managers determine whether the concept deserves further development and decide which geographic markets and consumer segments to target through the channel (Morwitz et al., 2007). To predict consumer behavior, it is necessary to know the attitudes, assessments, and internal factors that ultimately generate the purchase intent (Fishbein & Ajzen, 1977).

Purchase behavior has been studied in various marketing fields be-sides traditional purchasing in physical stores, such as green marketing (Nguyen et al., 2016), luxury brands and products (Beuckels & Hud-ders, 2016). Buying air tickets online is a form of ticket purchase when there is an internet connection device such as a computer, smartphone, etc, access to the official website of airlines to choose the service, airfare and personal information, flight schedules and bank account payments.

2.2. Related theoretical models

Over the past 20 years, the field of online buying behavior has become more popular and has gained much interest from researchers. Li and Zhang (2002) summarized 35 studies in the field of online shopping behavior in the world, of which 29 used the survey method. Most studies using TRA, TPB, and TAM show the sign of subjective norms, perceived behavior control, attitudes, perceived benefits, perceived ease of use and behavioral intention.

- Technology Acceptance Model – TAM

The Technology Acceptance Model (TAM) was developed by Davis (1989); Bagozzi and Warshaw (1992). The TAM model is widely recognized as a reliable and fundamental model for predicting a behavior by adopting the technology of any individual. The Internet access of consumers in Vietnam can be considered as the use of information technology for consumption purposes via the Internet, for this topic is the decision to buy air tickets online.

- Theory of Planned Behavior - TPB

The proposed behavioral theory is the development and improvement of the Theory of Reasoned Action by Ajzen and Fishbein (1975) and is the commonly used theory when it comes to predicting a particular behavior of any individual, may be the act of choosing to buy products or services; elective behavior, etc. The relationship between decision and behavior has been given and empirically tested in a wide range of studies in a wide range of areas including business administration, marketing, psychology. The two main factors influencing the decision are individual attitudes and subjective norms. In particular, individual attitudes are measured by belief and appreciation for the outcome of that behavior. Ajzen (1991) defined subjective norms as the perception of influencers that the individual should behave or not perform certain behaviors. (1) Attitude Toward Behavior (AB) is defined as positive or negative emotions that are affected by psychological factors and situations, (2) Subjective Norm (SN) or sense of community influence is defined as "perception of social pressure on whether or not to act, (3) Perceived Behavioral Control (PBC) reflects the ease or difficulty of performing behavior and whether the behavior is controlled or restricted. All three factors affect behavioral intention.

- Theory of Perceived Risk - TPR

In Theory of Perceived Risk (TPR), Bauer (1960) argued that the use of technology is always accompanied by risk, including two factors: (1) perceived risk of the product/service (risk types: loss of functionality, loss of funds, time consuming, loss of opportunity, and total perceived risk of the product or service), (2) perceived risk of online transactions (risks can occur when consumers conduct e-commerce transactions on means – electronic devices related to: confidentiality, safety - authentication, no refusal, and total perceived risk of online transactions).

Bauer's (1960) risk theory was used extensively in the study of online shopping behavior in which two case studies show that this theory is also used in the study of decision on purchasing and booking tickets (events, train tickets, air tickets, hotel reservations) online in general, and buying air tickets online in particular as researches by Kim, Kim and Shin (2009); Kim, Kim and Leung (2005).

2.3. Some researches in the world

The study by Kim, Kim and Shin (2009) used the TAM model in conjunction with two new concepts, Standardization and Reliability in the e-commerce environment, to predict the purchase of air tickets online of consumers in Seoul, Korea. The research model of the group consists of the following concepts: Perceived benefits, Perceived usefulness, Subjective norm, Attitude, Confidence. Research shows that all factors affect the consumer's intention to buy air tickets online in Seoul, Korea.

Hasslinger et al. (2007) investigated consumer behavior through the online shopping behavior study of Kristianstad University, Sweden. Research results show three components: Price, Convenience and Trust have a positive effect on consumer behavior.

Kim, Kim and Leong's study (2005) investigated the perceived risk factors that consumers experience when buying air ticket online. The research model of the group includes concepts such as Health Risks, Financial Risks, Time Risks, Social Risks, Psychological Risk, and Performance Risks. Results show that these factors affect the intention to buy online air tickets of consumers.

The research by Tran (2009) and Giao (2018a) on the factors affecting the intention to buy air ticket online used UTAUT model. Research results show that the factors: Efficiency, Social Impact, Favorable Conditions, Perceived Efforts, Perceived Risk, and Enthusiasm all affect the intention to buy air tickets online.

In the study by Nguyen (2013) and Giao (2018b), factors influencing consumers' online buying intention are: Perceived usefulness, Perceived ease of use, Price Expectancy, Confidence, Perceived Risk, Customer Experience, and Online Word of Mouth.

Figure 1. Model of factors influencing the intention to buy air ticket online of Vietnamese consumers

2.4. Research model and hypotheses

A study of the factors affecting the intention to buy air tickets online of consumers in Vietnam was built on the basis of Davis' TAM model (1989), however, eliminating Attitude variable and adding Subjective norm, Reputation of the airline (Nguyen & Leblanc, 2001; Hutton, et al., 2005, Giao, 2017), Perceived risk (Kim, Kim & Leong, 2005; Cunningham & et al., 2005, Giao, 2018b). Hence the proposed research model includes 06 influencing factors which have effects to intention to buy air tickets online of Vietnamese consumers (Figure 1). The origin of the scales is given in Table 1.

Table 1. Factors in the research model

Notation	Factor	Source
REPU	Reputation of the airline	Nguyen and Leblanc (2001); Hutton et al.(2005); Koppius et al.(2005)
SUBJ	Subjective norm	Venkatesh and Davis (2000); Mathieson(1991)
RISK	Perceived risk	Kim, Kim and Leong (2005); Cunningham et al.(2005)
ESAE	Perceived ease of use	Davis et al.(1989); Venkatesh and Davis (2000)
BENE	Perceived benefits	Davis et al.(1989); Venkatesh and Davis (2000)
RELI	Reliability	Kim, Kim and Shin (2009); Gefen and Straub (2000)
INTE	Intention to buy air ticket online	Manzari (2008); Tran (2009)

H₁: Reputation of the airline affects the intention to buy air ticket online of consumers positively.

H₂: Subjective norm affects the intention to buy air ticket online of consumers positively.

H₃: Perceived risk affects the intention to buy air ticket online of consumers negatively.

H₄: Perceived ease of use affects the intention to buy air ticket online of consumers positively.

H₅: Perceived benefits affects the intention to buy air ticket online of consumers positively.

H₆: Reliability affects the intention to buy air ticket online of consumers positively.

3. Result of research

3.1. Statistics description research

Convenient sampling method is used. After adjusting the scale by qualitative research with the expert interview method, the number of questionnaires sent by e-mail was 370, collecting 363 samples (98% response rate), valid number of samples is 331 (91%). Characteristics of survey samples are in table 2.

Table 2. Description of respondent information

		Quantity	Ratio %
Gender	Male	39	11.8
	Female	292	88.2
Age	From 18 to 23 years old	77	23.3
	From 23 to 40 years old	172	52.0
	From 40 to 50 years old	48	14.5
	Over 50 years old	34	10.3
	Below 5 mil. VND/month	57	17.2
	From 5 to 10 mil. per month	158	47.7
Income	From 10 - 20 mil. VND/month	74	22.4
	Over 20 mil. VND/month	42	12.7
	Student	43	13.0
Occupation	Office worker	184	55.6
	Businessman	84	25.4
	Other jobs	20	6.0
	Vietnam Airlines	86	26.0
Website	VietJet Air	101	30.5
	Jetstar Pacific Airlines	106	32.0
	Others	38	11.5

3.2. Determining and measuring the scale

The results show that the scales have satisfactory total correlation coefficients (> 0.30), all Cronbach's Alpha coefficients are over 0.6, 27 independent observed variables and 5 dependent observed variables continue to be processed.

Table 3. Test results of the scales

Scales	No. of variables	Cronbach's		Lowest item-total correlation coefficient
		Alpha		
Perceived benefit (BENE)	5	0.878	0.657	
Perceived Risk (RISK)	5	0.885	0.661	
Reputation (REPU)	7	0.900	0.644	
Subjective norm (SUBJ)	3	0.876	0.760	
Reliability (RELI)	4	0.801	0.563	
Perceived ease of use (EASE)	3	0.817	0.659	
Intention to buy air ticket online (INTE)	5	0.894	0.856	

(Source: Calculated from the sample)

3.3. Analyzing the EFA

The research uses EFA method for 27 independent observed variable, and uses the Principal Component Analysis method with Varimax rotation and the stoppage when extracting the Eigenvalues. The second EFA with the remaining 26 observed variables, the coefficient KMO = 0.990 satisfies the requirement of over 0.5. The suitable sample size for factor analysis and the Barlett coefficient having Sig. value = 0.000 < 0.5 (correlation between variables) assert that the above analysis method is appropriate (or satisfies conditions for factor analysis). The average variance extracted is 70,779%, which means 26 extracted variables account for 70.779% of the variation of the observed variables and the factor loading is greater than 0.5, which is satisfactory (Table 4).

Table 4. Second varimax rotation results

Variables	Factors					
	1	2	3	4	5	6
REPU ₁	0.799					
REPU ₂	0.782					
REPU ₃	0.748					
REPU ₄	0.715					
REPU ₅	0.549					
REPU ₆	0.529					
EASE ₂		0.848				
EASE ₃		0.847				
EASE ₁		0.81				
EASE ₄		0.803				
EASE ₅		0.767				
RISK ₁			0.815			
RISK ₂			0.77			
RISK ₃			0.697			
RISK ₄			0.679			
RISK ₅			0.531			
BENE ₁				0.796		
BENE ₂				0.736		
BENE ₃				0.639		
RELI ₁					0.831	
RELI ₃					0.695	
RELI ₂					0.693	
TR ₄					0.538	
SUBJ ₃						0.776
SUBJ ₂						0.763
SUBJ ₁						0.758

(Source: Analysis of official research data)

The results analyze the dependent factors with 5 observed variables, KMO coefficient = 0.834, and Barlett coefficient has Sig. = 0.000 < 0.5, variance extracted is 70,493% and variables have satisfactory factor loading which is greater than 0.5.

3.4. Determination of Pearson correlation coefficient

Table 5 shows the sig. values of both independent and dependent variables are equal to 0,000, so they are all statistically significant, independent variables correlating with dependent variables or variables in the model are suitable for running the regression model.

Table 5. Determination of Pearson correlation coefficient

	REPU	RISK	BENE	RELI	SUBJ	EASE	INTE
REPU		0.701**	0.629**	0.567**	0.636**	0.156**	0.570**
RISK	0.701**	1	0.580**	0.574**	0.546**	0.155**	0.470**
BENE	0.629**	0.580**	1	0.598**	0.582**	0.190**	0.762**
RELI	0.567**	0.574**	0.598**	1	0.525**	0.166**	0.581**
SUBJ	0.636**	0.546**	0.582**	0.525**	1	0.127*	0.544**
EASE	0.156**	0.155**	0.190**	0.166**	0.127*	1	0.240**
INTE	0.570**	0.470**	0.762**	0.581**	0.544**	0.240**	1

(Source: Measured by the authors)

3.5. Regression analysis

Table 6. Results of the adjusted R² coefficient

Model	R	R ²	Adjusted R ²	Standard error estimates	Durbin-Watson statistic
1	0.792a	0.627	0.62	0.43284	2.268

(Source: Measured by the authors)

Table 6 shows that $R^2 = 0.627 > 0$ and adjusted $R^2 = 0.620$, so the regression model is consistent, independent variables explaining about 62% variance of the dependent variables. Durbin-Watson statistic $1 < 2.268 < 3$, indicating that the model is consistent with the collected data.

Table 7. Analysis results of ANOVA

Model	Sum of squares	Degree of freedom	Mean squared error	Coefficient F	Sig.
Regression	101.886	6	16.981	90.640	0.000
1 Surplus	60.700	324	0.187		
Sum	162.586	330			

(Source: Measured by the authors)

Table 7 shows that the statistically significant value of $F = 90.640$ with sig. value = 0.000, the constructed linear regression model is consistent with the data set, the independent variables in the model are related to the dependent variables.

Table 8. Regression results

Independent variables	Unstandardized regression coefficient		Standardized regression coefficient	T	Sig.	Multicollinearity	
	B	Standard error	Beta			Tolerance	VIF
(Constant)	0.365	0.173		2.112	0.035		
REPU	0.105	0.053	0.110	2.005	0.046	0.385	2.597
RISK	-0.099	0.047	-0.106	-2.091	0.037	0.449	2.229
1 BENE	0.535	0.045	0.584	11.892	0.000	0.479	2.09
RELI	0.182	0.051	0.167	3.603	0.000	0.539	1.856
SUBJ	0.082	0.041	0.094	1.995	0.047	0.523	1.913
EASE	0.075	0.029	0.089	2.563	0.011	0.958	1.044

(Source: Measured by the authors)

Table 8 shows the variables included in the analysis have the Sig. coefficient < 0.05 , so the variables are meaningful. Variance inflation factor of independent variables in the model is < 3 (from 1.044 to 2.597), the multicollinearity of the independent variables was negligible. Regression model in accordance with survey data: *Intention to buy air ticket online* = $0.365 + 0.535*Perceived\ Benefit + 0.182*Reliability + 0.105*Reputation - 0.099*Perceived\ Risk + 0.082*Subjective\ Norm + 0.075*Perceived\ Ease\ of\ Use$. The results show that all the hypotheses outlined in the model are accepted and properly tested.

In detecting violations of linear regression models: the scatterplot shows that the residuals do not change in any order for the predicted value, they disperse randomly, the hypothesis of the multicollinearity is not violated. Spearman correlation coefficients of absolute values of residuals and independent variables: Sig value of correlation coefficients with 95% confidence intervals is greater than 0.05, indicating that the heteroscedasticity remains unchanged, assuming no violation. Coefficient $1 < Durbin-Watson = 2.268 < 3$ is satisfactory, the $VIF < 10$ shows that the independent variables are not closely related so there is no multicollinearity. Thus, the linear regression model constructed by the above equation does not violate the regression assumptions (Giao and Vuong, 2019).

Besides, the results of the study show that there is no difference in intention to buy air ticket online by age, occupation, age, income and website.

3.6. The result model

The test results show that the assumptions made in the accepted model include $H_1, H_2, H_3, H_4, H_5, H_6$. No hypothesis was rejected, they are significant statistics, and affect the decision to buy air ticket online of Vietnamese consumers. The results of the scale tests show that the scales are reliable, the model is consistent with the market data and the p-value reliability values are < 0.1 , so the factors that affect Intention to buy air ticket online of Vietnamese consumers (Figure 2).

Figure 2. Model of factors affecting intention to buy air tickets online of Vietnamese consumers

4. Discussion

Compared with Davis' TAM model (1989), this research still has 04 factors (Subjective norm, Perceived benefits, Perceived ease of use, Reliability), while Reputation of the airline was added following Nguyen and Leblanc (2001); Hutton, et al., (2005), and Perceived risk was added following Kim, Kim and Leong (2005); Cunningham and et al., (2005).

5. Conclusion

This study inherits fundamental theories such as TRA, TPB, and the results of previous studies to model the factors that influence the decision to buy air tickets online of consumers. In terms of research in the Vietnam market, the initial research model contain 36 observation variables made up of six dimensions: Reputation of the airline (REPU), Subjective norm (SUBJ), Reliability (RELI), Perceived risk (RISK), Perceived benefit (BENE), Perceived ease of use (EASE) which all effect to the dependent variable of Intention to buy air tickets online (INTE).

6. Limitations of the study

The research still has a number of limitations: (1) The theme is based primarily on the TRA model and the TPB, as well as inherits the results of prior studies without other appropriate adjustments to be able to understand the most

general behavior of buying air ticket online of Vietnamese consumers, (2) The research focused on the intention to buy air ticket online of Vietnamese consumers, have not gone further to the decision to buy air ticket online. That is also the direction for the next study.

Acknowledgements

The authors group would like to thank the experts and the respondents for providing valuable information in this study.

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