

Factors Affecting the Intention of Using Electronic Wallets of Vietnamese Tourists: a Case in Ho Chi Minh City

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Abstract

This scientific study is conducted to determine the factors that influence the intention of using e-wallets of Vietnamese tourists. The research results show that there are 5 groups of factors affecting the intention of using e-wallets of Vietnamese tourists including: (1) Perception of usefulness, (2) Perception of easy use, (3) Perception of Risk, (4) Social influence and (4) Attitude of Tourists. The results of this study are to accomplish 03 following objectives: Firstly, to identify the factors affecting the intention of using e-wallets of Vietnamese tourists; Secondly, to determine the level factors affecting the intention of using e-wallets of Vietnamese tourists; Thirdly, to propose administrative implications to enhance the intention of using e-wallets of Vietnamese tourists in the future.

Keywords: buying decision; electronic wallet; Online Services; satisfaction; quality of service.

INTRODUCTION

In the age of internet and digital technologies, the e-wallet has become a useful tool for travelers when traveling and this payment has gradually become attractive to numerous individuals. E-wallet is

a type of electronic account that functions as a wallet on the Internet to support users to transact in e-commerce activities. E-wallets are intermediaries of supplying services on behalf of banks, which make payments to users. The electronic wallet provider is responsible for balancing the interests of the parties during the transaction. When a user makes payment via an e-wallet, the e-wallet issuer is obliged to notify the supplier and request the supplier to deliver the goods to the user. E-wallets bring many benefits such as pay bills, top up phones with different mobile network operators, installment payments, online shopping, transfer money, pay for food and entertainment services, etc. This form of payment is extremely fast, convenient and safe. With 8 million customers, more than 200 million transactions annually, the total value of payment via e-wallets in Vietnam reached over VND 31,000 billion (Huynh Binh, 2018). However, having used, many customers complained about its service quality such as transmission errors, slow response to complaints from the networks, risk of losing money in their accounts, questioning the security of this wallet etc., which made them afraid of using this e-wallet service.

While e-wallets are used by many travelers in many countries, according to statistics, Vietnamese visitors are still rarely used (Phuong, 2019). It can be said that the market for e-wallet service business for tourists in Vietnam has just begun in recent years, so the opportunities for businesses in this sector are sizable. However, for e-wallets to meet the needs of consumers, there are still many challenges for these businesses.

LITERATURE REVIEW AND RESEARCH MODEL

It is proved that e-wallets are gradually growing their value, so more scientific research on consumer behavior for e-wallets has been conducted recently. Several research show that there are many factors affecting e-wallets such as: awareness of usefulness, awareness of easy use, awareness of social influence, etc. The results of Baraghani & Sara Naimi (2007), Ghezelayagh & Mojdeh (2006), Keaveney & Susan (1997) share the same opinion. Consumers have increasingly realized that using online services such as electronic wallets, internet banking helps them save time, reduce effort, make fast purchases, make many transactions anytime and anywhere, particularly

travelers feel secure to bring electronic wallets when traveling. They have no longer limitation in terms of time and place when shopping or making transactions (Hasslinger et al., 2007). For those who have no transportation, living in crowded areas or in bad weather easily feel the convenience and benefits of this technology service, especially when the Covid pandemic broke out in many parts of the world, it was recommended not to use cash. These studies also show that the constraints of this online business service have disturbed users such as technical infrastructure errors, specific connection quality, poor network access speed, low security system leading to the loss of money in the accounts.

Ajzen and Fishbein (1975) also indicated that the two factors "attitude" and "subjective standard" (subjective opinion) of ones can involve the others' consumption trend. User attitudes are measured by perceptions upon the properties of the product or service. The "subjective standard" factor can be measured based on ones' impact related to consumers (such as family, friends, colleagues, acquaintances, social network community). The level of impact and influence of the "subjective standard" or "social influencer" on the buying trend of consumers can be seen as following the level of support or opposition to consumers' purchases and consumer incentives resulting influencers' reaction. The stronger the level of intimacy among these stakeholders to the consumers is, the higher the likelihood that consumers will follow the wishes of those involved.

Therefore, based on the theories, doctrines, related research results and expert opinion test results, it can be concluded that factors influence the intention of using e-wallets of Vietnamese tourists (variable Y) including Perception of usefulness, Perception of easy use, Perception of Risk, Social influence and Attitude of Tourists (variable X).

RESEARCH HYPOTHESIS

The relationship between "Perception of usefulness" and "intention using e-wallets"

Perception of usefulness is based on certainty reasons (Lee, 2008). There are two types of awareness of usefulness, which can be classified into direct and indirect benefits. Direct benefits refer to

immediate, tangible benefits that customers will benefit from using the product or service. Also customers can benefit from a wider range of financial and time benefits, and faster transaction speed. Indirect benefits is defined later and intangible profit and it is difficult for users to recognized. (Baraghani & Sara Naimi, 2007).

Hypothesis H1: The more the providers increase the perception of usefulness, and perception of benefits when using e-wallets, the higher the intention of using e-wallets of tourists is.

The relationship between "Perception of easy use" and "intention using e-wallets"

Perception of easy use is defined as the degree to which an individual believes that using a particular service system will require no effort (Chuttur, 2009). Theoretically, perception of easy use is perceived when consumers feel that it is understandable and accessible to use the electronic wallet payment system.

Hypothesis H2: The "perception of easy use " of users will influence the intention of using e-wallets

The relationship between "perception of risk" and intention using e-wallets

Wang et al. (2003) stated that "perception of risk" is believed to have hazard in purchasing products and services online. Bauer (1960) mentioned that awareness of risk is related to the uncertainty and the consequences associated with consumers' actions. According to Theory of Planned Behavior (TPB), risk perception can reduce uncertainty of consumers' behavior as well as have a negative impact on their behavioral decisions. Conversely, if perception of risk associated with online transactions is reduced, and consumers are able to better control their behaviors in the online environment, they are willing to trade (Pavlou, 2001).

Hypothesis H3: The "perception of risk " of the users will influence the intention of using e-wallets.

The relationship between "attitude" and "intention using e-wallets"

Ajzen (1991) argues that an individual's "attitude" is measured by his beliefs and appreciation of the outcome of that behavior. Attitude

toward service is an individual's positive or negative emotion about implementing the target behavior. The attitude theory mentions that the more favorable to a product or service one's attitude is, the more likely that one will buy or use the product (Ajzen and Fishbein, 1980).

Hypothesis H4: The "attitude" of users will influence the intention of using e-wallets.

The relationship between "social influence" and the intention of using e-wallets.

According to Venkatesh et al. (2015), "social influence" is a concept that indicates the positive or negative impact of external factors on an individual. Social influence is built from three concepts for example subjective standards, social factors and images. The authors conclude that "Subjective standards" are one of the factors more frequently appearing and having the most influence on using service behavior by visitors. That means the influence of social community as relatives, friends, co-workers and social networking community to the intention of using services of that individual.

Hypothesis H5: Factors in the "social influence" group will influence the intention of using e-wallets.

RESEARCH METHODS

A combination of qualitative and quantitative research methods was conducted in this study. The qualitative research method was used to carry on to group discussions, to consult experts to select observed variables and group of observed variables to be included in the research model. Based on the group of factors influencing the intention of using e-wallets of Vietnamese tourists, a survey questionnaire was designed to collect data from 452 travelers using e-wallets. Research model includes 05 scales, 27 observed variables. The 5-level Likert scale also is also covered. The survey results are entered and SPSS version 20.0 is employed. It is convenient to send sampling through the online survey submission. According to Hair (2006), the sample size was determined based on the following formula: sau: $N = \sum_{j=1}^m k p_j$. D. Therefore, the size of the sample based on the minimum and the number of variables are included in the analysis model. The minimum is 50, the ratio of samples to the analysis of variables (k) is

5/1 or 10/1. That means a variable in the questionnaire requires relatively 05 or 10 samples. The scale for this study has 24 observed variables, so the sample size must be at least $n: 24 * 5 = 120$ (n is the sample size, m is the number of observed variables). In agreement with Lee (2012), depending on the object of study, the research objectives and the subject it is able to increase the sample in order to gain the reliability of the data. A survey of 452 samples was executed. After testing reliability by Cronbach's Alpha coefficient, exploratory factor analysis was implemented to minimize and summarize the data of the scales. This method is based on factor extraction factor (Eigenvalue), whereby only factors with factor extraction factor (Eigenvalue) greater than 1 will be retained, while others less than 1 will not summarize information better than a root variable because after standardizing each root variable has a variance of 1. The principal components method and the Varimax Procedure is used to minimize the number of large coefficients at the same factor, increasing the ability to interpret the factors. Finally, the above results are used to multiple linear regression analysis in order to test the model's assumptions, thereby considering the impact of these factors on the intention of using e-wallets of tourists in Ho Chi Minh City.

RESEARCH RESULTS & DISCUSSION

Table 1: Results of Cronbach’s Alpha coefficient analysis

Variables	Codes	Factors	Cronbach’s Alpha
Independent	PU	Perception of usefulness	0,876
	PE	Perception of easy use	0,882
	PR	Perception of risk	0,791
	SI	Social influence	0,801
	AT	Attitude	0,819
Dependent	UB	Intention to use	0,778

The results of the reliability test show that the scales have a relatively high accuracy with Cronbach's Alpha coefficient> 0.7 and the correlation coefficient of the total variables of all variables satisfies the allowed standards (both greater than 0.3). Therefore, after a Cronbach’s Alpha coefficients analysis, all observed variables suit the conditions for analysis of the EFA factor.

Table 2: Exploratory Factor Analysis

<i>Component</i>	<i>Initial Eigenvalues</i>		
	<i>Total</i>	<i>% of Variance</i>	<i>Cumulative %</i>
1	3.762	31.229	29.221
2	2.872	19.143	44.432
3	2.534	13.657	49.234
4	1.646	11.241	66.001
5	1.882	7.696	70.467

After utilizing the Exploratory Factor Analysis (EFA), the results are shown in Table 2. The total extracted variance is 70,467% greater than 50% which means that the extracted factors are explained 72,099% for the model, the remaining 29,533% is explained by other factors. Besides the number of factor extraction (Eigenvalue) is greater than 1, so it is kept.

Table 3: ANOVA

ANOVA ^a						
<i>Model</i>		<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
1	Regression	44.377	5	5.879	67.712	.000 ^b
	Residual	23.335	447	.197		
	Total	67.712	452			

The test results with the value $F = 67,712$ and $Sig. = 0.000 < 0.05$ show that the construction model is consistent with the data set and the variables included in the model are related to the dependent variable. In general, regression analysis with selected reliability is 99%, corresponding to the selected variables with statistical significance level is $p < 0.01$. Through the results, all variables are satisfied as required. Testing the model's suitability shows that multicollinearity phenomenon does not violate ($VIF < 10$).

Table 4: Factors affecting customers' decision to use products and services

<i>Model</i>		<i>Unstandardized Coefficients</i>		<i>Standardized Coefficients</i>	<i>t</i>	<i>Sig.</i>	<i>95.0% Confidence Interval for B</i>		<i>Collinearity Statistics</i>	
		<i>B</i>	<i>Std. Error</i>	<i>Beta</i>			<i>Lower Bound</i>	<i>Upper Bound</i>	<i>Tolerance</i>	<i>VIF</i>
1	(Constant)	-.291	.124		-.761	.542	-.991	.325		
	AT	.261	.059	.357	2.541	.001	.168	.321	.660	1.001
	PE	.163	.053	.191	3.768	.000	.067	.202	.393	1.020
	PU	.296	.052	.359	6.112	.000	.195	.387	.873	1.121
	SI	.175	.050	.220	5.076	.000	.077	.223	.812	1.267
	PR	.224	.061	.217	3.070	.000	.231	.373	.774	1.006

The results of regression analysis in Table 4 show that all factors influence the intention of using e-wallets of Vietnamese tourists with the following order of impact level: (1) Perceived Usefulness) with $\beta = 0.359$; (2) Attitude (Attitude), $\beta = 0.357$; (3) Social Influence, $\beta = 0.220$; (4) Perceived Risk: $\beta = 0.217$; (5) Perceived Ease-of-use, $\beta = 0.191$. The regression equation has the following form: $Y = 0.359X_1 + 0.357X_2 + 0.220X_3 + 0.217X_4 + 0.191X_5$. The results of this research are the basis for proposing the solutions for e-wallet business to enhance the intention of using e-wallets of Vietnamese tourists in the coming time. The results of this research also have many similarities with the results of Khanh Tram (2019) on the situation of using e-wallet services in Hue city. The study was conducted on 456 people with the knowledge of e-wallet services. Most of them appreciate the benefits of e-wallet service. The survey results showed that consumers find e-wallet service really useful, with many advantages such as saving time, incentives, promotions and convenience. With e-wallets, users can conduct transactions anytime and anywhere (Table 5). Thus, businesses should pay attention to maintain and promote the benefits that e-wallets can bring to attract more users of this service.

Table 5: Benefits and risks of using e-wallets

No	The criteria	The average value
BE	Benefits of e-wallet service	Mean
1	Time saving	4.50
2	More incentives and promotions	4.44
3	Transaction anytime and anywhere	4.49
4	Traveling cost saving	4.32
5	Effective management and control of online payment transactions	4.02
RW	Risks of e-wallet service	Mean
1	Exposing user information ability	3.98
2	Annoying legal issues related to e-wallets	3.42
3	Technical problem ability	2.67
4	Increasing the ability of losing money in personal accounts	2.65

Source: Khanh Tram (2019)

This research also points out that consumers are aware of the benefits of e-wallets, but they are also afraid of the risks it can bring. This problem needs paying attention from the providers to stakeholders in order to improve the quality of customer service.

MANAGEMENT IMPLICATIONS

Based on the above research results, the management implications are recommended for e-wallet businesses as following:

Firstly, businesses need to have many activities to raise tourists' awareness about the usefulness of using e-wallets. From positive awareness, it is able to lead to long-term use and attachment of visitors.

Secondly, it is necessary for businesses to enhance connectivity with distribution intermediaries such as banks, hotels, resorts, restaurants, telecommunications companies, transport firms, airlines, etc, in order to improve quality service providing to visitors.

Thirdly, e-wallet enterprises need to meet the standards of technical infrastructure such as having good base, technical structures, modern communication systems, and information security to allow payment on multiple media (computers, mobile phones), and through multiple transaction channels (Internet banking, mobile banking, payment cards), along with suitable plans and technological solutions to the requirements of payment intermediary service providers

Fourthly, enterprises need to promote marketing communications on social networking sites, on social media to increase the level of interaction and connect with visitors to attract these potential users.

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