Factors Affecting Intention to Use Facebook-Banking of Generation Y in Vietnam

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Abstract

To succeed in retail banking requires banks to apply often new technologies in their business to satisfy the various demand of a great amount of individual customers. While many banks have a tendency to provide banking technology applications to customers, generation Y is quite the potential customers, particularly a completely new service called Facebook-banking (FB). Therefore, this paper is conducted in order to evaluate the factors influencing the intention to use FB of generation Y (Gen Y). Basing on the Technology Acceptance Model - TAM (Davis, 1989), our research model is recommended with five factors directly or indirectly affecting the intention to use FB of Gen Y. After analyzing the data collected from our survey, we indicate three major factors influencing Gen Y's intention to use FB in Vietnam. According to the findings, some recommendations are suggested to banks to provide efficient FB services to Gen Y in Vietnam.

Keywords: behavioral economics, generation Y, Facebook-banking, Vietnam

1. Introduction

Retail banking can be defined as the directly banking services provided to small businesses, households or individuals. Promoting retail banking may help banks not only have stable profit but also reduce risks thanks to the great amount of individual customers with small-scale transactions. As a result, retail banking has been a new trend of banks recently. Evidently, banks in Vietnam have no exception.

In fact, Vietnam is considered to be a potential market of retail banking for some following reasons: the population exceeds 90 million; the average income per capita remains low; the demand for finance is rapidly increasing; the percentage of small and medium-sized enterprises (SME) in Vietnam is about 90%.

Being aware of that, a huge number of banks in Vietnam are focusing on individual customers, constantly changing their banking services, applying new technologies in their business since these play an important role in meeting the various demand of a great amount of customers. However, not all individuals are capable of accessing the high-tech services of banks in Vietnam. Once banks have a tendency to provide technological services to customers, Gen Y in this country become the potential customers. Gen Y could be defined as a group of people at the age between 19 and 35. In terms of quantity, Gen Y makes up about 25% in total population of Vietnam. In terms of compatibility with banks, they also have many suitable characteristics for banks' aims.

Nevertheless, from the stand point of the banks in Vietnam, the exploitation of Gen Y's segmentation reveals some limitations. Using the distribution channel via Facebook to have a better connection with Gen Y has not been in use. Thus, our research aims to determine factors affecting the intention of Gen Y to choose banking distribution channel, Facebook, called Facebook-banking. The findings could make some contributions to the development of banks in Vietnam.

2. Literature Review

Normally, the residents of the world from World War II (1945) to the end of twentieth century is divided into three major generations: Baby Boomers Generation, Generation X and Generation Y. Gen Y is different from the two previous generations since they are the first to grow up with the spread of computers and the Internet. In general, the technology has become an inseparable part of their lives. Almost all of them can master some technological skills and apply the usefulness of technology in their work. In addition, the social networks such as Facebook, Twitter or

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YouTube have become highly popular with Gen Y. In the situation that banks have a tendency to utilize technology with the target to improve their business, it is necessary to use social network as a new distribution channel so as to engage individual customers as well as Gen Y. Consequently, this not only gets on well with benefits of banks but also strengthens their competitiveness tendency in order to attract more customers.

Gen Y in Vietnam generally has the characteristics indicated by researchers. These characteristics make Gen Y become the segmentation of potential customers of retail banking. Firstly, as above-mentioned, the population of Vietnam at the age between 19 and 35 makes up about 25% in total population of Vietnam, a fairly large number. Secondly, almost all of Gen Y now are studying or working, they will need financial supports from banks at some point for tuition, living expenses, home loans. Moreover, they are growing with the development of the Internet and its social network applications like Facebook, Twitters,... According to some statistics, the number of Internet users in Vietnam accounts for 43.9% in total population. Other statistics mentioned that about 73% of total Internet users are under the age of 35 and the percentage of social network users is 86%. It is Vietnam that the nation has the most rapid increase in Facebook users by 146% in six months. According to our observation, most of them are under the age of 34.

All in all, Gen Y is interested in technology in general and the Internet in particular. It is concluded that they will become obviously the potential customers when banks provide distribution channels via the Internet, especially Facebook-banking (FB). Sharma and Kotkar (2015) define that FB is a new way of banking which is providing the banking products and services through Facebook account with the help of the Internet. FB is based on Facebook application which is one of the popular applications of social media. For this reason, it is an easy way to connect with Gen Y. Besides, Sharma and Kotkar (2015) also states that the opportunities of FB are utilization of social media, enrichment in brand name, 24x7 approach and expansion in customer happiness. Facebookwill become a powerful tool to attract Gen Y.

When evaluating the customers' adoption of a new technology, Fred Davis (1989) introduced the Technology Acceptance Model (TAM). The author indicated that "Perceived Usefulness" and "Perceived Ease of Use" are the two factors explaining "Attitude towards Behavior". It is this attitude that plays an important role in one's decision to use a service or not. Directly related to banking sector, a variety of researches have been conducted when many banks focus on applying technology in their business to engage better with customers. Almost all of researches indicated that it is necessary for banks to promote technology in retail banking. Moreover, they identified the factors influencing the adoption of some new banking service such as Internet-banking, Mobile-banking... Basing on the theories of reasoned action, planned behavior and technology acceptance model (Davis, 1989), Podder Braja (2005) recommended an extent TAM model consists of four factors affecting the adoption and using of Internet-banking. They are "Perceived Usefulness", "Perceived Ease of Use", "Perceived Risk" and "Perceived Self-efficacy". According to the author, customers who feel confident to master a new technology will have a positive attitude with this technology. It is a new theory added together with the theories in the original model of Davis, Nour-Mohammad Yaghoubi (2010) conducted the research called "Factors Affecting the Adoption of Online Banking: An Integration of Technology Acceptance Model and Theory of Planned Behavior". One again, all the theories proposed in the original model of Davis (1989) and other prior research were proved. Ali Saled Al-Ajam and Khalid Md Nor (2013) constructed a technology acceptance model using TAM model of Davis (1989) and extending 2 new factors that are "Relative Advantage" and "Trust" in their research named "Internet Banking Adoption: Integrating Technology Acceptance Model and Trust". Nguyen Duy Thanh and Cao Hao Thi (2011) recommended the model E-BAM based on actual conditions in Vietnam combined with three main theories: TRA model, TBP and TAM. The result indicated that all of the eight factors consisting expected effects, compatibility, perceived ease of use, perceived behavioral control, risks involved in transactions, image of bank, law have influence on the adoption of E-banking. However, there is no research focusing on applying appropriate technology for different customer segments as well as distribution channel via social networks. This paper is therefore seeking to contribute to close this gap.

3. Methodology

The research model is built based on the technology acceptance model TAM (Davis, 1989). Actual Use of a system of an individual is affected by his or her Intention to Use it. Intention to Use this system is determined by Attitude towards Behavior, which is respectively influenced by Perceived Usefulness and Perceived Ease of Use of the system. In our model, we expand two more factors affecting users' Attitude: Attraction and Risk. Perceived Usefulness has directly influenced Intention to Use and had no influence on Attitude towards Behavior, which is different from the hypothesis in the original model of Davis (1989).

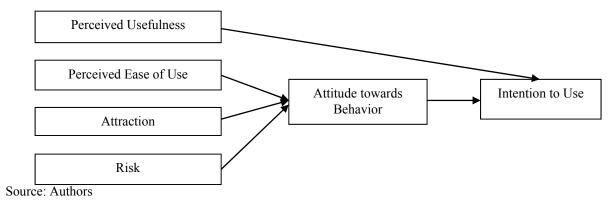


Figure 1. Researching model

- Perceived Usefulness is defined as the degree to which an individual believes that using a system will increase his or her job performance. With Facebook-banking, if an individual feels the usefulness of it, he may immediately decide to use it. In other words, Perceived Usefulness will have a positive effect on the Intention to Use Facebook-banking. So the first hypothesis was given:

H₁: Perceived Usefulness will have a positive effect on the Intention to Use.

- Perceived Ease of Use is defined as the degree to which an individual believes that he can easily use a system without any efforts. Generally, users will be more in favor of using one system if they think they can use it more easily than if they think it is too complicated to use. Similarly to some prior research, we hypothesize:

H₂: Perceived Ease of Use will have a positive effect on Attitude towards Behavior.

- Attraction of a new system is the extent to which an individual is interested in it. Since Facebook-banking is a new way to distribute bank services through Facebook, the attraction of it will play an important key in users' attitude:

H₃: Attraction will have a positive effect on Attitude towards Behavior.

- Risk is regarded as a factor related to this model since Risk will become a barrier preventing users from using a system. Customers are aware of risk if they see the system is unreliable. They are afraid of many unexpected results when deciding to use an unsafe system. Never do they have a positive attitude with such a system. Therefore, the next hypothesis is suggested:

H₄: Risk will have a negative effect on Attitude towards Behavior.

- Attitude towards Behavior: The attitude plays an important role in users' Intention to use a system. When Facebook-banking is introduced to customers, person who has positive attitude on it will have intention to use it. In contrast, a negative attitude on Facebook-banking cannot lead one person to the intention to use it. The relationship between Attitude towards Behavior and Intention to Use is illustrated in the hypothesis:

H₅: Attitude towards Behavior will have a positive effect on Intention to Use.

Therefore, relying on the theoretical basis and the research model, the scales were constructed and include six main groups: Perceived Usefulness Scales, Perceived Ease of Use Scales, Attraction Scales, Risk Scales, Attitude towards Behavior Scales and Intention to Use Scales. Each word in every item is carefully modified so that almost all of the respondents can fully understand the questions. Then we use the Likert Scale, with five point scale: strongly disagree, disagree, undecided, agree, and strongly agree. The sample method is to directly hand questionnaires out to respondents in Hanoi. The questionnaires were given to respondents that might be Gen Y. Our survey was conducted in Hanoi.

4. Result and Discussion

The results of the descriptive analysis show that the respondents consist of 85 men (57%) and 64 women (43%). Of these, 63 people were born between 1981 and 1989 and 86 people were born between 1990 and 1996. However, the uniformity about the interviewees' occupation is not high, almost all of them focused on pupils/students (40.9%) and office workers (29.5%). Besides, customers still deal with the bank at the brand or use ATM. In Vietnam, the application of Mobile-banking and Internet-banking in transactions with the banks is not common for Generation Y.

On the other hand, the concept of Facebook-banking is uncommon in Vietnam. Only 9.4% of the respondents are aware of this channel.

In our model, we conduct analysis of reliability, factor analysis, correlation analysis and regression analysis for six groups of factors in proposed model: Perceived Usefulness, Perceived Ease of Use, Attraction, Risk, Attitude towards Behavior and Intention to Use.

The result shows that standards of Cronbach's alpha coefficient are greater than or equal to 0.6. The reason is Facebook-banking is a new concept for those who were interviewed in Vietnam. However, Cronbach's alpha coefficient of Attraction is unsuitable (0.368 < 0.6). After considering the results of the analysis of each variable in this group, we decided to delete variable "I am accustomed to using Facebook". After cancelling the variable "I am accustomed to using Facebook", the reliability of the contributing factors ensure requirement which is 0.6 or higher, and the results after adjustment described in Table1below.

Table 1. Results of analysis of reliability after deleting variables "I am accustomed to use Facebook" in group "Attraction"

Factors	The number of observed variables	Cronbach's Alpha
Perceived Usefulness	4	0.844
Perceived Ease of Use	4	0.793
Attraction	4	0.764
Risk	6	0.904
Attitude towards Behavior	5	0.874
Intention to Use	2	0.887

Source: Authors

Factor analysis uses the rotation method Varimax and we have five groups of factors such as Table 2 below.

Table 2. Factors after analyzing the reliability and factor analysis

Factors	Variables
Perceived Usefulness	4
Perceived Ease of Use and Attraction	8
Risk	6
Attitude towards Behavior	5
Intention to Use	2

Source: Authors

The total variance extracted of three independent factors – Perceived Usefulness, Perceived Ease of Use and Attraction, Risk – equals to 62.193%; therefore, the 62.193% of variation of data is explained. In addition, the total variance extracted of two dependent variables – Attitude towards Behavior and Intention to Use – are respectively 66.770% and 89.823%, which explain the variation of data quite well.

In the correlation analysis, item "I think I need to consult the opinion of the users who used Facebook-banking before" in factor "Perceived Ease of Use and Attraction" has a weak correlation (less than 0.3) with 2 others variables in the group – "I think it is more comfortable to use Facebook-banking than deal with the bank at the brands" and "I think I will use Facebook-banking because there will be many people using it". Besides, the variables "I think I need to consult the opinion of the users who used Facebook-banking before" correlates weakly with the dependent variable "Attitude towards Behavior" so this variable is excluded from the model.

The variables in factor "Risk" interrelate with a significance level of 1% but they have no correlation (less than 0.2) with the dependent variable "Attitude towards Behavior". Therefore, this factor also is excluded from the model.

The variables in factors are correlated each other with the level of significance of 1% and we have the results of correlation analysis shown in Table 3.

Table 3. The variables in the model after correlation analysis

Factors	Variables				
	I think Facebook-banking is a flexible channel.				
Perceived Usefulness	I think Facebook-banking helps me update information about bank's services quickly. I think Facebook-banking helps me reduce procedures comparing with transactions at the bank.				
	I think I will save time when I use Facebook-banking.				
	I think I can deal with the bank's staffs by chat tool or webcam.				
	I think Facebook-banking has many features.				
	I think Facebook-banking has a clear arrangement and it is easy for me to understand.				
Perceived Ease of Use and Attraction	I think the operation with Facebook-banking will be easy.				
	I think it's easy to look for information of individual account, the products and services of the bank on Facebook-banking. I think I will use Facebook-banking because there will be many people using it. I think it is more comfortable to use Facebook-banking than dealing with the bank at the brands.				
	I support the banks in providing Facebook-banking to customers.				
	I find it comfortable to use Facebook-banking to deal with the bank.				
Attitude towards Behavior	I feel secure with Facebook-banking.				
	I am interested in Facebook-banking.				
	I want to introduce Facebook-banking to my relatives and my friends.				
Intention to Use	I will intend to use Facebook-banking if the banks in Vietnam provide it. I will intend to use frequently Facebook-banking if the banks in Vietnam provide it.				

Source: Authors

There are two paths in regression analysis. For the first path, Perceived Ease of Use and Attraction affects Attitude towards Behavior. For the second path, Perceived Usefulness and Attitude towards Behavior impact on Intention to Use. When analyzing the data, autocorrelation and multicol-linearity do not happen because the Durbin-Watson index and Variance Inflation Factor (VIF) coefficient in two paths are suitable with the requirements.

We conduct regression analysis in the first path. The R_1^2 – adjusted equals to 40.7%. It means that Perceived Ease of Use and Attraction explains 40.7% of the variation of Attitude towards Behavior.

Table 4. The suitability of the model based on R₁² and Durbin-Watson

Model Summary ^b						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson	
1	.641ª	.411	.407	.58936	1.961	

a. Predictors: (Constant), Perceived Ease of Use and Attraction

b. Dependent Variable: Attitude towards Behavior

Source: Authors

Table 5. The regression result for variable "Attitude towards Behavior"

	Coefficients ^a							
Model		Unstandardized Coefficients		Standardized Coefficients			Co-linearity Statistics	
		В	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	.812	.240		3.383	.001		
	Perceived Ease of Use and Attraction	.690	.068	.641	10.119	.000	1.000	1.000

a. Dependent Variable: Attitude towards Behavior

For the second path, the R_2^2 – adjusted is 55.4%so 2 factors Perceived Usefulness and Attitude towards Behavior explain 55.4% of the variation of Intention to Use.

Source: Authors

Table 6. The suitability of the model based on R₂² and Durbin-Watson

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.748 ^a	.560	.554	.61558	1.466

a. Predictors: (Constant), Attitude towards Behavior, Perceived Usefulness

b. Dependent Variable: Intention to Use

Source: Authors

Table 7. The regression result for variable "Intention to Use"

				Coefficients ^a				
Model –		Unstandardized Coefficients		Standardized Coefficients			Co-linearity Statistics	
Mode		В	Std. Error	Beta	t	Sig.	Tolerance	VIF
1	(Constant)	.025	.245		.101	.920		
	Perceived Usefulness	.151	.071	.137	2.121	.036	.726	1.377
	Attitude towards Behavior	.805	.078	.668	10.368	.000	.726	1.377

a. Dependent Variable: Intention to Use

Source: Authors

To determinate the R_2 – adjusted of the overall model, we conduct the path analysis which is an extension of multiple regression analysis. The R^2 – adjusted is defined by the formula:

$$R^2 = 1 - (1 - R_1^2)(1 - R_2^2)$$

We have: $R^2 = 1 - (1 - 0.407)(1 - 0.554) = 0.7355$

It means that the independent variables explain 73.55% of the variation of the dependent variables in the model.

The results of hypothesis testing are presented in Table 8.

Table 8. The result of hypothesis testing

Hypothesis	Results		
H ₁ : Perceived Usefulness has a positive effect on Intention to Use.	Acceptance (p < 1%)		
H ₂ : Perceived Ease of Use and Attraction have a positive effect on Attitude towards Behavior.	Acceptance (p < 1%)		
H ₃ : Attitude towards Behaviorhas a positive effect on Intention to Use.	Acceptance (p < 1%)		

Source: Authors

According to the results in Table 8 above, we find that all independent variables affect dependent variables positively. For this reason, if banks in Vietnam want to expand their retail banking by focusing on Gen Y, they should increase the usefulness and ease of use of FB. Besides, they also need concentrate on activities to raise Gen Y's attitude to make them be interested in FB.

5. Conclusion

This paper has constructed an expanded TAM model and identified two factors affecting the Intention to use Facebook-banking of Gen Y in Vietnam. They are *Perceived Usefulness* and *Attitude towards Behavior*. In addition, Attitude towards Behavior is influenced by Perceived Usefulness and Attraction. As a result, we also practically gave some recommendations to banks in Vietnam when focusing on developing retail banking. Based on this research, we

suggest banks in Vietnam should be aware of the potential of Gen Y if they want to be successful in this area. Moreover, Facebook-banking could be an effective new way to engage better with Gen Y. Therefore, we recommend banks to make attempt to impact on factors affecting the Internet to use Facebook-banking of Gen Y in Vietnam so as to change their intention. Furthermore, the aim of our future study is to expand the scale of survey by increasing the number of respondent and doing survey not only in Hanoi but in the nationwide scale of Vietnam.

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