

Factors Influencing Intention to Use Social Insurance Application (VssID) in Vietnam Through Technology Acceptance Model

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Abstract

Technology is becoming more and more popular in public services in general and social insurance in particular in Vietnam. Although the social insurance software has been used since November 2020, the number of users is still limited so far. Therefore, this study aims at investigating determinants of the intention to use social insurance management applications of Vietnamese people. Applying a combination of three models (TAM, TRA and TPB), the study identifies five determinants of technology acceptance of users in their intention to use this application in Vietnam's Social Insurance, including Perceived usefulness, Perceived ease of use, Subjective norm, Perceived behavioral control, and Attitude towards usage. Data for the study were collected through a survey in three big Vietnamese cities: Ho Chi Minh City, Hanoi and Da Nang. Research results show that users' technology acceptance intention in social insurance in Vietnam is positively influenced by all five factors. From the analysis results, the study proposes recommendations related to improving the performance of the application, propagandizing the high applicability of VssID to the public. Policies and guidelines for the government to promote user's habit of using the application are also recommended.

Keywords: Social insurance, intention to use, technology acceptance, VssID

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1. Introduction

Along with the strong development of the 4th industrial revolution as well as the emergence of the Covid-19 pandemic, people are paying more attention to applying technology in all fields, especially ensuring benefits against unexpected risks. Grasping that trend, over the years, Vietnam's social insurance has determined to invest in developing information technology system in the direction of e-Government towards Digital Government, especially through the use of the VssID application – digital social insurance. VssID - Digital Social insurance application is an information service application on the mobile platform of Social insurance Vietnam (Social insurance Vietnam, 2022). The goal of the application is to establish a channel to get access to information and perform public services for individuals participating in social insurance more conveniently, to replace conventional paper management methods in social insurance.

According to statistics of Vietnam Social Insurance (2021), by the end of May 2021, more than 15 million people participating in Social insurance was recorded. By the end of December 31, 2021, the number of people participating in Social insurance has reached more than 16.5 million people, an increase of 2.1% compared to 2020, with 33.75% of people in the working age. Despite witnessing significant developments, changes in some policies has caused the number of people participating in Social insurance to increase slowly compared to the Government's expectations due to the impact of the Covid-19 pandemic (Vietnam Social insurance, 2022). With the goal of improving people's insurance participation, on May 28, 2021, Vietnam Social insurance officially authorized citizen information from the national public service portal and in the application of "VssID – Digital Social insurance".

This article focuses on studying factors affecting users' intention to accept and use VssID application in social insurance in Vietnam, thereby making recommendations to increase the number of users and improve the users' experience.

2. Theoretical Framework

The research is carried out on the basis of the combination of the Technology Acceptance Model – TAM (Davis et al., 1989), Theory of Reasoned Action - TRA (Fishbein & Ajzen, 1975) and Theory of Planned Behavior - TPB (Ajzen, 1991). In fact, TAM, TRA and TPB and Unified theories of acceptance and use of technology - UTAUT (Venkatesh et al., 2003) are very popular models used to investigate users' intention to adopt technology.

The TAM model explains the general determinants of computer acceptance which explains the usage intention and usage behavior of end users of computer technology on a large scale (Davis et al., 1989). The basic TAM model tests the two most important personal beliefs about adopting information technology: Perceived usefulness and Perceived ease of use. Both factors have a direct impact on Attitude towards Usage, Intention to Use and Actual Usage.

TRA is established to predict intention (Fishbein & Ajzen, 1975) with two main factors: Attitude and



Subjective Norm. The TPB assumes that behavioral intention leads to behavior and behavioral intention is determined by an individual's attitude towards the behavior, along with the influence of subjective norms surrounding the performance of those behaviors. This theory emphasizes that attitude and Subjective Norm are important determinants of behavioral intention.

In addition, Ajzen's TPB (1991) helps to predict and explain individuals' behavior when performing any job in the same research content and context. The model assumes that the intention to perform a behavior or to use it will be influenced by three factors such as Attitude towards the behavior, Subjective norm (similar to the TRA) and perceived behavioral control. Attitude is a person's attitude toward a particular behavior, which is measured by the belief that performing the behavior is beneficial. Perceived social pressure is a community factor, especially pressure from surrounding people (also understood as expectation) or community pressure will be able to affect people who have behavioral intentions. Perceived behavioral control is the perception of available resources and the ability to seize the opportunity of performing a particular behavior. People assume that the more resources and ability to take opportunities and the fewer perceived obstacles, the greater perceived behavioral control.

The first UTAUT model was developed by Venkatesh et al. (2003). This theoretical framework is based on eight previous studies on technology adoption: TRA, TAM, Motivational Model (MM), TPB, a combination of TAM and TPB (C-TAM-TPB), model of personal computer utilization (MPCU), innovation diffusion theory (IDT), and socio-cognitive theory (SCT). The model revolves around four key determinants of user's behavioral intentions when using technology: Performance expectancy, Expected Effort, Social Influence, and Favorable Conditions; and is moderated by gender, age, experience, and voluntary use.

Depending on the research contexts and user characteristics, researchers can use the original model or apply a model that combines factors appropriately.

3. Literature Review

Existing research in technology acceptance largely uses the TAM of Davis et al. (1989). When investigating the acceptance and the usage of electronic insurance (E-insurance), Toukabr et al. (2021) simultaneously used the TAM and TPB model to study factors influencing the adoption of e-insurance. Findings of this study provide decision makers in insurance companies with useful information in designing online services, creating positive attitudes towards e-insurance and attracting customers.

Ranong et al. (2019) choose the TRA when investigating the life insurance purchase decision. The findings show that attitude towards saving, trustworthiness of salespeople, attitude towards buying and perceived quality have a significant and positive impact on purchase decisions. On the other hand, attitude toward the brand and subjective norm were found to have no effects.

The theoretical framework of TPB is also used to investigate the intention to buy life insurance of people in two big cities, Hanoi and Ho Chi Minh City in Vietnam (Mai et al., 2020). Results show that life insurance purchase behavior is influenced by purchase intention, attitude, financial literacy and access to product. Furthermore, financial literacy and access to products are believed to play an essential role in life insurance buying behavior.

With the goal of surveying the needs of customers to use online insurance, and at the same time to find out the factors affecting the intention to use and behavior of using online insurance services in Vietnam, Thanh Huyen et al. (2019) was based on the theoretical basis of the UTAUT model. The study shows that the factors of risk perception, trust, social influence, and performance expectancy affect the intention to use online insurance and the correlation between intention and behavior to use insurance. online insurance.

Common factors that influence the intention to use are Attitude towards behavior, Subjective norm and Perceived behavioral control (Ajzen, 1988). Attitude towards behavior is defined as a person's attitude towards a particular behavior and is as measured by the belief that performing the behavior is beneficial (Le, 2020). Tam et al. (2021) studied the factors that influence the attitude towards and intention to use private health insurance. Analyzing these factors provides a more comprehensive research framework to identify factors affecting the attitudes toward and intention to use private health insurance.

Subjective norm refers to the belief that an important person or group of people will approve of and support a particular behavior. Ajzen (1991) again stated that to measure this factor, respondents are often asked to evaluate the extent to which important people will propagate, encourage or oppose a particular behavior. In his research, Simanjaya (2020) claims that evaluation and reputation of acquaintances, the encouragement and approval of surrounding people when the survey respondents perform an action influence their subjective norms.

Perceived behavioral control refers to people's perceptions of the degree to which they are capable of, or have control over the situation and is defined as a combination of self control and self-efficacy (Ajzen, 2002). This variable refers to the presence of resources or availability of resources and opportunities required to perform a specific behavior and is influenced by a number of factors. According to Taylor & Todd (1995), resource-based facilitating conditions were significant determinants of perceived behavioral control. According to Aitken et al. (2020), by improving more information on product packaging such as information which is beneficial to health, environment and society, consumers can increase their behavioral control to reinforce the intention to buy organic



products.

When studying technology adoption behavior, common factors are Perceived usefulness, Perceived ease of use, Attitude towards usage, Intention to use, Performance expectancy, Expectations, Social Influence, and Facilitating Conditions.

Davis (1989) defined perceived usefulness as "the degree to which a person believes that using a particular system will improve his or her job performance". In particular, Nguyen & Doan (2018) indicate that perceived usefulness has the strongest impact on customers' smartphone purchase behavior. The authors recommend increasing customers' awareness of useful applications on smartphones to help customers have a favorable view as well as recognize benefits of using smartphones. Since then, smartphones have become more widely accepted and used

Perceived ease of use is "the degree to which a person believes that using a particular system will be effortless" (Davis, 1989). Ease of use is, at the same time, a fundamental determinant of a user's intention to use a particular technology (Maroofi et al., 2013). According to Dang (2014), Ease of use has a great influence on consumers' intention to use new technology services because when a computer user believes in the ability to execute an easy task (purchase) on the computer depends on a lot of the computer's interface design, training programs on how to use the computer, the language, and the software installed on the computer.

Attitude towards usage is understood as an individual's positive or negative feelings about performing a target behavior (Hsu, 2016). Therefore, when individuals have a positive attitude towards a behavior, the likelihood of performing that behavior will be higher (Tsang et al., 2004), or the attitude has a positive influence on the actual behavior (Tsang et al., 2004; Lin, 2011). Kazaure & Abdullah (2019) find that attitude towards usage acts as a mediator on intention to use.

Intention to use is "the individual's intention to perform the activity" (Kazaure & Abdullah, 2019). According to Nath et al. (2013), Perceived usefulness and Perceived ease of use continue to favorably influence Intention to Use, which in turn affects a person's attitude towards using the system and Feel its usefulness. These factors will increase the likelihood of IT usage. System developers understand the interrelationship of these variables and keep these in mind throughout the entire system of the development lifecycle, especially while defining system requirements.

Research by Berdibayev et al. (2021) considers Performance expectancy as convincing users about the effectiveness of using online financial services to achieve financial goals. Performance expectancy is indicated to have a significant positive effect on intention to use service in many studies by the authors, only with differences in the degree of influence.

Davis's (1989) definition states Effort Expectancy is the degree to which a person believes that a particular system can be used with little effort. The assumption that the more people believe that using such services is effortless, the easier it is for users to generate an intention to use is supported by numerous studies (Nguyen et al., 2014; Berdibayev et al., 2021).

According to Carlsson et al. (2006), Social influence has a positive effect on intention to use. However, according to Rasika (2018) in a research paper on technology adoption in the specific case of Asian Alliance Insurance PLC, Social Influence does not have an important impact on technology adoption. In general, Social Influence has a positive effect on intention and usage behavior in most studies; however, their influence is only moderate or low, even not strong enough to be recognized.

Venkatesh et al. (2003) define Facilitation as the degree to which an individual believes that technical and organizational infrastructure exists to support the use of the system. Carlsson et al. (2006) stated that Facilitation does not have a strong direct impact on intention to use, which contradicts the results of Akbar (2013) and Rasika (2018), when Convenience was found to be an important predictor of Intention to Use. Zhou et al. (2010) also conclude that Facilitation has a great impact on user acceptance. Similar to Social Influence, Facilitation has an influence on intention to use in most studies, but the magnitude varies greatly with each study due to differences in topics and fields of research.

In Vietnam, there have not been many in-depth studies on technology application in Social insurance, especially users' intention to accept VssID. The literature review shows that, even in Vietnam, researchers have only focused on studying users' intentions and technology acceptance in the field of private insurance. Therefore, the researchers aim at investigating factors affecting the intention to accept technology in participating and monitoring the social insurance interests of users in Vietnam, and proposing appropriate recommendations in order to increase users' awareness of and intention to use public services, increase usefulness for themselves, increase transparency and reduce pressure on the Social insurance service system.

4. Research Framework And Research Methods

4.1 Research Framework

Based on the above theoretical and literature review, the researchers propose the following research framework on the basis of TAM.



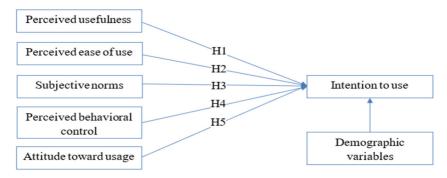


Figure 1. Research framework

(Source: Adapted from TAM, Davis & et al. (1989))

According to the above mentioned research framework, the researchers posited the following hypotheses:

- H1: "Perceived usefulness" has a positive influence on customers' "Intention to use" VssID application, a technology of social insurance in Vietnam.
- H2: "Perceived ease of use" has a positive influence on customers' "Intention to use" VssID application, a technology of social insurance in Vietnam.
- H3: "Subjective norms" has a positive influence on customers' "Intention to use" VssID application, a technology of social insurance in Vietnam.
- H4: "Perceived behavioral control" has a positive influence on customers' "Intention to use" VssID application, a technology of social insurance in Vietnam.
- H5: "Attitude towards usage" has a positive influence on customers' "Intention to use" VssID application, a technology of social insurance in Vietnam.

4.2 Research Methods

The study used a quantitative research method with the statistical tool of SPSS 20.0. Cronbach's Alpha was used to measure the reliability of the scale. After that, EFA was conducted to evaluate the convergent and discriminant validity of the scale. Finally, Multiple Linear Regression was performed to test the relationship between independent variables and the dependent variable. The study uses primary data through a self-reported survey with a convenience sampling method. Survey respondents are Vietnamese people who have not used the VssID application and those who are using the VssID application. The study collected 392 responses from three major cities representing three regions in Vietnam: Hanoi, Da Nang and Ho Chi Minh City.

5. Analysis Results

5.1 Results

Cronbach's Alpha coefficient is used to measure the reliability of the variables. Corrected Item – Total Correlation is greater than 0.3; and Cronbach's Alpha coefficients of all items are larger than 0.6, indicating high internal reliability. Exploratory factor analysis (EFA) results also have satisfactory results. Specifically, in the first attempt of EFA, three items SN1, SN3, and PU2 were removed due to not satisfying the requirements. In the second EFA attempt, KMO coefficient was 0.929, Bartlett test was 0.000, and no items were excluded. The EFA results of the dependent variable also show that KMO coefficient is 0.856, Bartlett test's value is 0.000, less than 0.5, indicating that the data is deemed for further analysis, and the relationship between observed variables are correlated with each other.

Table 1. Correlation coefficients among factors

		BI	PU	SN	PBC	ATU	PEU
BI	Correlation coefficient	1	.730**	.661**	.596**	.630**	.631**
PU	Correlation coefficient	.730**	1	.560**	.493**	.522**	.601**
SN	Correlation coefficient	.661**	.560**	1	.534**	.516**	.545**
PBC	Correlation coefficient	.596**	.493**	.534**	1	.624**	.523**
ATU	Correlation coefficient	.630**	.522**	.516**	.624**	1	.505**
PEU	Correlation coefficient	.631**	.601**	.545**	.523**	.505**	1

(Source: Authors' analysis results)

As can be seen from Table 1, the significance values of Pearson correlation coefficient between five independent variables PU, SN, PBC, ATU, PEU with dependent variable BI are all 0.000 (<0.05). Thus, there is a linear relationship between these independent variables and the dependent variable. The correlation between BI and PU is the strongest with r = 0.730, with PBC being the weakest with r = 0.596.

Two independent variables are correlated (with significance of less than 0.05) and the absolute value of the



correlation coefficient is greater than 0.7, the probability of collinearity between them is relatively high (Dormann et al., 2013). The Pearson correlation coefficients between the independent variables are quite large (>0.4), indicating that there is a possibility of multicollinearity. Therefore, it is necessary to test the VIF coefficient when linear regression is performed to reach the final conclusion.

Table 2. Model Summary

Mod	el R		\mathbb{R}^2	Adjusted R ²	Standard Deviation	Durbin-Watson
1	.829	Эа	.687	.683	.40496	2.039

(Source: Authors' analysis results)

As can be seen from Table 2, R and R² are 0.829 and 0.687, respectively. Adjusted R² is 0.683 (greater than 0.5). Accordingly, it can be concluded that the relationship between independent and dependent variables is significant. In the regression model, the independent variables will explain a 68.3% variation in the dependent variable – intention to use VssID of Vietnamese users. The model is acceptable for further analysis.

Table 3. Linear regression analysis results

	Madal	Unstandardized Coefficient		Standardized Coefficient		C:-	Multicollinearity	
	Model	В	Std Error	Beta] ·	Sig.	Tolerance	Variance Inflation Factor (VIF)
	(Constant)	.300	.125		2.398	.017		
	PU	.320	.033	.374	9.564	.000	.530	1.887
1	SN	.181	.031	.227	5.942	.000	.557	1.796
1	PBC	.100	.037	.106	2.683	.008	.521	1.918
	ATU	.172	.037	.183	4.671	.000	.527	1.898
	PEU	.104	.030	.134	3.452	.001	.535	1.868
				a. Dependent varial	ole: BI			

(Source: Authors' analysis results)

As can be seen from the regression analysis results, standardized correlations are larger than 0, and Sig. < 0.05, indicating that all 5 independent variables have influences on Intention to use VssID of Vietnamese people. VIF values of independent variables are smaller than 10, indicating that multicollinearity does not exist. For better implications, the standardized coefficient β was used. Comparison of standardized coefficient Beta reveals that: Perceived usefulness has the strongest influence ($\beta = 0.374$ and sig. = 0.000), followed by Subjective norms ($\beta = 0.227$ and sig. = 0.000), Attitude towards usage ($\beta = 0.183$ and sig. = 0.000), Perceived ease of use ($\beta = 0.134$ and sig. = 0.001). Perceived behavioral control has the smallest influence on Intention to use ($\beta = 0.106$ and sig. = 0.008).

The regression equation of the model with standardized coefficient β as follows:

$$BI = 0.374*PU + 0.227*SN + 0.183*ATU + 0.134*PEU + 0.106*PBC$$

According to the regression equation of the model with standardized coefficient β , the independent variable with the highest absolute value of β will have the strongest influence on the dependent variable and vice versa. Therefore, the strength of influence of independent variables on the dependent variable of Intention to use are as follows, with a respective decreasing level: PU - SN - ATU - PEU - PBC.

5.2 Discussion Of Analysis Results

5.2.1 Perceived Usefulness

Table 4. Descriptive analysis of Perceived usefulness

	Measurement items	Minimum	Maximum	Mean	Standard deviation
PU1	VssID helps me look up information about social insurance / medical insurance accurately and timely.	1	5	3.86	1.022
PU2	VssID helps me use public services and administrative procedures conveniently.	1	5	3.64	1.054
PU3	VssID helps me to propose opinions and contributions to policy makers about social insurance / medical insurance.	1	5	3.73	.890
PU4	VssID helps me make better decisions to participate in types of social insurance / medical insurance.	1	5	3.62	1.094
PU5	VssID saves my time.	1	5	3.78	1.078

(Source: Authors' analysis results)

Perceived usefulness has the greatest influence on Intention to use VssID. The majority of users agree that VssID's functions are useful to them. Especially the function of looking up information and proposing opinions to



policy makers received the greatest level of agreement, thereby confirming that VssID supports users in making decisions to participate in social insurance, and saving more time than usual.

However, a small percentage of respondents think that the functions are still not useful enough, especially in public services and administrative procedures. This result can be considered as a consequence of shortcomings in software development, or because it is not propagandized and promoted as much as other features of VssID. 5.2.2 Perceived Ease Of Use

Table 5. Descriptive analysis of Perceived ease of use

	Measurement items	Minimum	Maximum	Mean	Standard deviation
PEU1	Getting used to VssID system is easy for me.	1	5	3.83	1.052
PEU2	I find VssID clear and easy to use.	1	5	3.73	1.071
PEU3	I can master VssID easily.	1	5	3.75	1.107

(Source: Authors' analysis results)

Perceived ease of use has a positive influence on Intention to Use VssID, but the magnitude of the influence is not significant. Accordingly, statistics shows that most of the respondents agree with statements related to perceived ease of use. The majority of survey respondents mentioned that the VssID system was easy to get used to, understand, and master, although there were still some difficulties in using it. To further increase the usage rate, the interface and software system of the application should be improved so that users can easily access VssID. 5.2.3 Subjective Norms

Table 6. Descriptive analysis of Subjective norms

	Measurement items	Minimum	Maximum	Mean	Standard deviation
SN1	The social insurance agency often propagandizes and encourages me to use VssID.	1	5	3.93	.851
SN2	The frequent propaganda activities of the social insurance agency influence my decision to use VssID.	1	5	3.74	.917
SN3	My friends and colleagues encourage me to use VssID.	1	5	3.68	1.192
SN4	The encouragement from my friends and colleagues influences my decision to use VssID.	1	5	3.66	1.142
SN5	My family supports me to use VssID.	1	5	3.68	1.143
SN6	The encouragement from my family influences my decision to use VssID.	1	5	3.73	1.152
SN7	Reviews and reputation from people I know motivates me to use VssID.	1	5	3.79	1.125

(Source: Authors' analysis results)

Subjective norms have an important influence on Intention to use VssID. Most of the responses show that friends, colleagues and family members, in turn, support the increasing use of VssID. In particular, the government has the greatest encouragement and impact. However, the government's encouragement does not influence the decision to use it as much as that of friends, colleagues and family and relatives. In order to further promote the use of VssID, it is necessary to upgrade the application to improve each user's personal experience, so that each user will recommend the application to surrounding others.

5.2.4 Perceived Behavioral Control

Table 7. Descriptive analysis of Perceived behavioral control

	Measurement items	Minimum	Maximum	Mean	Standard deviation
PBC1	I have enough resources and infrastructure to use VssID.	1	5	4.16	1.004
PBC2	I have knowledge and ability to use VssID.	1	5	4.06	.997
PBC3	I have enough time to use VssID funtions effectively.	1	5	3.93	.969
PBC4	I can use VssID without help from others.	1	5	3.98	.969
PBC5	The decision to use VssID is my personal choice.	1	5	4.06	.998

(Source: Authors' analysis results)

Although most VssID users who participated in the survey agreed with statements related to perceived behavioral control, this factor does not influence or has very small influence on Intention to use. Most responses



reveal that they have facilitating conditions to use the application, especially infrastructure resources. However, some still claim that they do not have the ability or do not have time to use the application.

5.2.5 Attitude Towards Usage

Table 8. Descriptive analysis of Attitude towards usage

	Measurement items	Minimum	Maximum	Mean	Standard deviation
ATU1	I have positive feeling towards using VssID.	1	5	4.06	1.007
ATU2	Using VssID stays update with the current technological development trend.	1	5	4.02	1.067
ATU3	Using VssID is beneficial.	1	5	3.97	1.081
ATU4	Social securities agencies should apply VssID more widely.	1	5	4.00	1.055
ATU5	VssID should be used more widely in community.	1	5	4.06	1.065
ATU6	I like using VssID.	1	5	4.00	1.070

(Source: Authors' analysis results)

Although ranked the third impact in the survey, attitudes towards usage received the largest amount of total agreement from respondents. It can be seen that most participants have a positive perception of VssID, believing that VssID has many benefits and catches up with the country's digital development trend. Therefore, more people are supporting the social insurance agency to apply VssID more widely. However, a small percentage of respondents do not have favorable opinions for VssID. To overcome this situation, the Social insurance agency needs to continue to actively propagandize and make improvements to the interface and services of the software. 5.2.6 Intention To Use

Table 9. Descriptive analysis of Intention to use

	Measurement items	Minimum	Maximum	Mean	Standard deviation
BI1	I will use VssID more often in the future.	1	5	3.59	.923
BI2	I will recommend VssID to my acquaintances.	1	5	3.58	.945
BI3	I will prioritize using VssID to look up information about social insurance / medical insurance over other sources (newspapers, books, etc.).	1	5	3.71	.934
BI4	I will use VssID more often when I use public services and administrative procedures.	1	5	3.61	.936
BI5	I will use VssID more often when I need to propose my opinions or contribution related to policies of the government about social insurance/medical insurance.	1	5	3.67	.896

(Source: Authors' analysis results)

According to collected data related to Intention to Use, it can be seen that the majority of survey respondents intend to recommend VssID to their acquaintances, will use the application more often in the future, especially mentioning their intention to use the application, especially to propose their opinions, and contribution to the government's policy on Social insurance / health insurance. They also mention that they will prioritize using this application to look up information over other sources. A small number of respondents who do not want to use the application more in the future may be negatively affected by one or more of the above factors. Therefore, the application needs to be actively propagandized and further improved in terms of features and software interface to be used more frequently.

The above figures show a positive implication that the VssID application has a lot of potential to reach more people and tend to develop further in the future. Along with the development of young generations - who are embracing the current trend of Digital Transformation, the VssID application has potential for development. Based on regression analysis results and descriptive statistics, the authors realized that in order to improve user behavior, it is necessary to focus mainly on communication and software improvement. In addition, the Social insurance agency also needs to issue proper policies to overcome existing problems and optimize the user experience.

6. Recommendations

Based on findings of the research on the current situation of using VssID application, it can be seen that it is vital to find solutions to promote users' habit of using technology in social insurance. Especifically, recommendations on improving the application or changing communication methods and policies should be made to have a farreaching influence on the entire population.



6.1 Improving The Application

According to the analysis results, "Perceived usefulness" has the strongest influence on "Intention to use". The item "VssID makes public services and administrative procedures convenient for me" was ranked the lowest although users have a positive view toward the usefulness of the application. That can be seen more clearly when the factor "Perceived ease of use" is ranked the second lowest after "Perceived behavioral control". To improve the user experience and help users perceive the usefulness of the application better, the authors propose the following recommendations:

Firstly, strengthen the assurance of information insurance for users. When conducting information insurance risk assessment and management, it is necessary to develop a complete picture of the information insurance risks that an organization is likely to face, assess prioritization, and develop a system of overall, unified and complete control measures to reduce risks.

Second, application developers need to actively listen to constructive reviews and feedback from users, and respond to frequently asked questions from users, from which they can continuously develop and update available questions and answers which can help users to actively acquire information about the application.

Third, developers need to build a system that provides a detailed description of the application that displays automatically right after the user downloads the application and logs in for the first time to save their time. Fourth, integrate online payment functions for individuals on the VssID application to ensure that people can make transactions with Social insurance agencies wherever and whenever they want.

6.2 Improving Communication

The analysis results also show that "subjective norms" is the second most influential factor on the intention to use the application. The item "Friends and colleagues encourage me to use VssID" and "My family members support me to use VssID" respectively are ranked the lowest. Accordingly, although intention to use VssID is greatly affected by other people, many others still have not recognized the benefits of this application. The authors propose three recommendations to improve the effectiveness of communication activities for the application:

Firstly, to increase the awareness of the application, application developers need to strengthen their coordination with reputable and highly recognizable press agencies such as media channels such as internet, newspapers and radio stations in cities and provinces. In addition, the information on propagandizing leaflets must be concise, clear and revealing useful information for users to read, understand, remember. The information should be especially suitable for many people.

Second, to increase reliability, the social insurance agency should actively coordinate with other government and provincial departments and agencies to integrate promotion program of VssID application into Social insurance policies. At the same time, it is necessary to establish a contact point about VssID application that is reliable, well managed and effective on Zalo and Facebook pages or via messages of mobile networks such as Viettel, Mobifone, etc. They could consider providing additional privileges for agencies using the social insurance application.

Thirdly, to increase the number of users, the social insurance agencies should coordinate with Farmers' Union, Women's Union, Employment Service Center to deliver information about VssID to more audiences.

6.3 Recommendations For Policy Makers

Firstly, government agencies need to specifically mention the rights for VssID application users, for example, priority benefits when directly dealing with public administrative procedures.

Second, government agencies need to support to broadcast information about Social insurance in general as well as the advantages of using VssID application in particular on national mass media channels.

Third, the Social insurance agency needs to step by step completely change the data system, synchronize digitalization to motivate users to use the application more often.

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