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## Assessing Perception And Attitude Of Supporting Of Enterprises Regarding The Continued Application Of E-Tax In Vietnam

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**Abstract:** The study is based on a combination of the Theory of Reasoned Action (TRA) and Diffusion of innovation theory (DOI) to assess the perception and attitude of supporting of enterprises regarding the continued application of e-tax in Vietnam. Based on the reliability analysis of Cronbach's Alpha, EFA analysis, correlation analysis, and linear regression analysis, the research will provide experimental evidence to determine the level of perception and attitude of supporting of the enterprises, and factors affecting the perception and attitude of continued applying e-tax. The results show that the perception and attitude of continued applying e-tax of enterprises are on average level; attitude towards the continued application of e-tax by enterprises is positively influenced by perceptions of the benefits of e-tax, the compliance of e-tax, the ease of use of e-tax and negatively affected by the perceived risk of e-tax; the intention to continue applying e-tax is strongly influenced by (1) the attitude of continued use, (2) behavioral attitudes and (3) voluntary attitude of continued application of e-tax. Based on the results of analysis and verification of survey data, the study proposes appropriate recommendations to maintain and develop the application of e-tax in Vietnam; contribute to tax administrative reform; facilitate enterprises in tax-paying; and improve the national competitiveness index in the tax field.

**Keywords:** E-tax, enterprises, attitude of supporting.

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### INTRODUCTION

Vietnam has been currently implementing modernization of the national administration with the inevitable step of the application of information technology in public administration service reform. On August 27, 2010, the Prime Minister signed Decision No. 1605/QĐ-TTg approving the National Program on information technology application in the activities of state agencies (Prime Minister, 2010), with the goal of 2020 is to create a platform to develop e-government in Vietnam.

According to that trend, e-tax is considered an extremely urgent project in Vietnam and is a core innovation in the tax industry. E-tax is an important component of the e-government system in Vietnam, contributing to provide a high-level and wide-range of online public services for people and enterprises, making the operation of state agencies is more transparent, serving people and enterprises better. In addition, e-tax also contributes to improving national competitiveness in tax administration.

E-tax was implemented in Vietnam at the end of 2009, started with the online tax declaration, and was officially launched in 2010. After six years of implementation, Vietnam has achieved certain results on tax declaration and e-tax payment. At the end of 2016, the e-tax declaration service was deployed in 63 provinces and cities and at all subordinated tax departments. The rate of enterprises filing online tax was 99.8% in 2016. The number of enterprises registering to use e-tax payment service with tax authorities increased rapidly, from 18,835 enterprises in 2014 to over 555,000 enterprises in 2016 after a mandatory e-tax payment policy of the Ministry of Finance. The rate of enterprises completing registration at tax authorities and commercial banks in 2015 was 89.88% and 97.06% of organizations and people receiving results online (reaching level four on information technology application) when implementing obligations to the state (General Department of Taxation, 2015).

Although Vietnam has achieved initial success in e-tax implementation, there are a number of challenges of maintaining online tax declaration and e-tax payment, and continuously improving the application level of other e-tax services. The perception and attitude of supporting of enterprises regarding the continued application of e-tax play an important role in maintaining and developing e-tax. Therefore, this study focuses on clarifying factors affecting the perception and attitude of supporting the continued application of e-tax, thereby proposing a number of recommendations to maintain and develop the application of e-tax in Vietnam, and contribute to tax

administrative reform, create good conditions for enterprises in tax payment, improving national competitiveness indexes in the tax field.

## **LITERATURE REVIEW**

### **E-tax and e-tax characteristics**

Many organizations and researchers have proposed specific concepts of e-tax. However, the concept proposed by World Bank ensures generalization, suitability for most of the countries implementing this type of information technology application. Thereby, e-tax is the application of information technology and communication, including the internet, mobile phone network, and other forms of information technology such as computers, devices that store and copy data from public agencies in the process of administrative management to transmit information and provide citizens, enterprises with tax services and among government agencies.

From the above concept, e-tax could be understood through three aspects: (1) e-tax uses information technology and communication in public management; (2) this system conveys information and provides tax declaration and tax payment services to citizens, enterprises, and among other government agencies; (3) the application of e-tax has brought many benefits and has a great potential base on its advantages.

### **Perception and attitude of supporting of enterprises regarding the continued application of e-tax**

#### **Perception of e-tax**

Perception of enterprises towards the use of e-tax includes: (1) perceived usefulness; (2) ease of use; (3) compatibility; (4) perceived risk.

The perceived usefulness of e-tax is the extent to which enterprises believe that using e-tax systems will improve the results of enterprises.

The ease of use of e-tax is the extent to which enterprises believe that there is no need for effort when using the e-tax system.

The compatibility is an awareness of the compatibility of the e-tax system that the extent to which enterprises suppose the e-tax system is consistent with the value, style, and way of doing the work.

The perceived risk when using e-tax is the extent to which enterprises believe that using the system will cause problems for them.

To assess the perception of enterprises on e-tax, the study examines all four groups of the above-mentioned perceptions in order to have a comprehensive view of enterprises' perception of e-tax.

#### **Attitude of supporting e-tax**

The attitude of supporting the use of technology is an emotional element. It decides the behavior of using real technology. Burton-Jones and Hubona (2006) argue that the actual use of information technology will go through stages: external factors affect users' perception; users' belief and perception affect the attitude towards using technology; attitude affects the intention of using technology; and the intention affects the level of using information technology (Burton-Jones and Hubona, 2006). In this study, the attitude of supporting the continued application of e-tax includes (1) attitude towards the continued application of e-tax and (2) intention to continue applying e-tax.

### **Perception and attitude of supporting of enterprises regarding the continued application of e-tax**

In the past decades, researchers have explained the reasons for using information technology and predicted this intention by evaluating the impact of perception and attitude on technology. These studies are divided into two directions: initial application and continued application of information technology. For technologies that have been applied universally and have been implemented in a long time, the study of aspects related to continuing using technology is important (Gebauer, 2013). Bhattachejee (2001) pointed out that the ultimate success of IT application depends on continued use rather than initial use. Therefore, this study focuses on assessing the perception and attitude of supporting of enterprises regarding the continued application of e-tax in Vietnam.

### **The proposed model assessing the perception and attitude of supporting of enterprises regarding the continued application of e-tax**

This research inherits the study of Karahanna et al (1999) to assess the perception and attitude of supporting of enterprises regarding the continued application of e-tax in Vietnam. The research model is based on a combination of the Theory of reasoned action (TRA) and Diffusion of Innovation Theory (DOI). However, the research model has some adjustments. These adjustments are drawn from a number of other studies. Factors in the model include:

#### **Perceived Usefulness**

Perceived usefulness of information technology (according to the TAM model) not only impacts attitudes and intention of using e-tax, but also influences the attitude and intention to continue using e-tax (Gebauer et al

2013). Karahanna et al (1999, p.208) indicated the advantages of the perceived usefulness of information technology such as (1) to help accomplish work quickly; (2) to improve the quality of work; (3) to increase work efficiency; (4) to make work easier.

Based on the technology adoption model (TAM), the influence of perceived usefulness on the intention to continue using e-government website is measured through aspects: (1) accomplishing work quickly; (2) the e-government results are clear; (3) cutting travel costs; (4) cutting down on time for queuing and traveling; (5) doing transactions at any time without limitation.

#### **Ease of Use**

Ease of use (in the TAM model) has been shown to not only affect attitudes and intentions of using e-tax but also influence attitudes and intentions to continue using e-tax (Gebauer et al, 2013). The ease of use in the DOI model is the complicity - it is that there is no need for much effort in using information technology. The ease of use has been shown to affect the attitude of continuous using information technology (Karahanna et al, 1999; Azwadi et al, 2012), affect the intention to continue using the e-government website (Wangpiatwong and authors, 2008). Karahanna et al (1999) measure the ease of use of information technology through (1) simple to learn (2) easy to use; (3) difficult to use. Wangpiatwong et al measured the ease of use through (1) easy to access; (2) easy to collect information; (3) easy to complete transactions via e-government website; (4) easy to understand the way of organising and structuring e-government website.

#### **Compatibility**

Compatibility is the users' perception of the suitability of technology to the work that individuals are doing (Karahanna et al, 1999). Compatibility is considered the factor having the strongest influence among the factors affecting the attitude of using e-government. Karahanna et al (1999) measured compatibility through: (1) compatibility with most of the personal work characteristics; (2) suitability with working style; (3) suitability with the way of doing things that individuals prefer.

#### **Perceived risk**

The perceived risk of e-government is considered as the degree to which an individual believes in government agencies and technology and believes that using services will not cause problems for them.

The perceived risk of e-government includes concerns of privacy, finance, and security. Thus, the acceptance level of the perceived risk of an individual could impact the decision of using or not using e-government as well as electronic transactions. Therefore, when taxpayers using the e-tax system, they will be concerned that their personal security could be threatened and this will prevent taxpayers from adopting the e-tax payment system.

#### **Self-efficacy**

Compeau and Higgins (1995) defined self-efficacy as "personal awareness of their own ability when applying IT to accomplish work" (quoted on Wangpiatwong and authors, 2008, p.57). Based on Suki and Ramayah (2010) study that applies the TPB model to analyze the e-government acceptance, "self-efficacy" positively influences perceived behavioral control of using e-government, with scales (1) feeling convenient when using e-government systems; (2) e-government system can be used reasonably; (3) self-using the e-government system without any support.

#### **Favorable conditions**

Favorable conditions include resource elements (such as time and finance) and compatible technology factors, the availability of necessary training and support, policy... Suki and Ramayah (2010) tested the positive impact of favorable conditions on "favorable conditions" with scales (1) resources for e-government application is always available; (2) having access to the necessary hardware, software, and services when using e-government; (3) feeling limited by resources when using e-government.

#### **Perceived behavioral control**

According to Ajzen (1991), perceived behavioral control reflects the belief in accessing necessary resources and opportunities to perform a behavior. Perceived behavioral control is influenced by two factors "favorable conditions" and "self-efficacy". Suki and Ramayah (2010) also showed that when resources are available, knowledge and skills are adequate, perceived behavioral control does not affect the intention to use e-government.

#### **Perceived voluntariness**

According to Moore (1989), perceived voluntariness is a factor affecting the intention to use technology, but not a dichotomous variable (voluntary and mandatory). The perceived voluntariness has also been demonstrated in Karahanna et al (1999) study that the less voluntariness, the weaker attitude, and intention towards using technology.

#### **Subjective norm**

Subjective norm or normative belief shows that users consider the influence of other people involved in using or continuing to use the technology. Subjective influences (considered the collective effect) are, therefore, a factor affecting the intention to use (continue to use) technology (Karahanna et al, 1999).

**Attitude toward continue using e-tax**

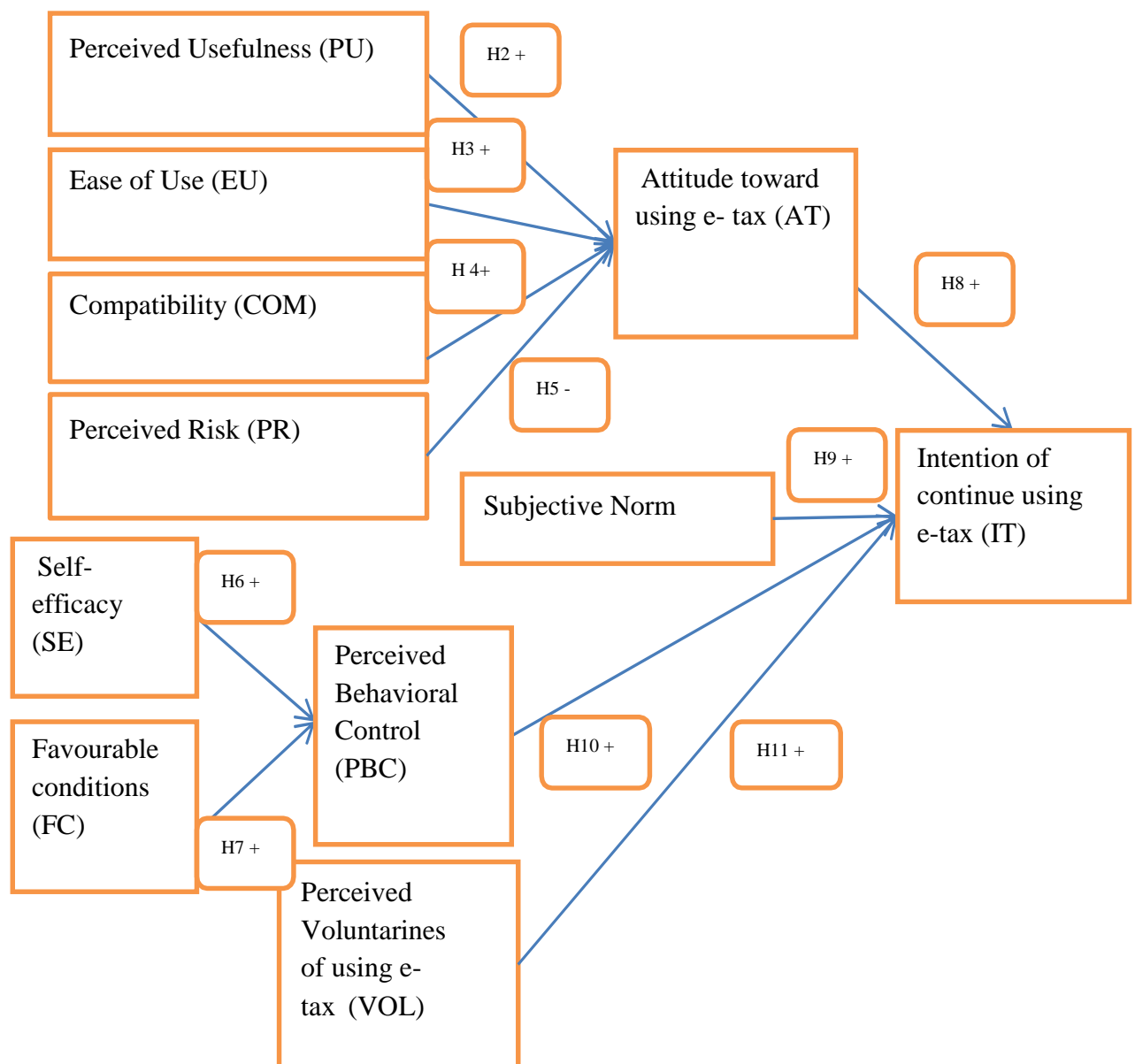
Attitude is formed from three sources of information: information relating to behavior in the past, influential information, and self-awareness information (Zanna and Rempel, 1988, quoted in Karahanna et al, 1999). The attitude towards continued using e-tax is determined by whether users will receive good or bad/positive or negative technology usage in the next 6 months.

**Intention of continue using e-tax**

According to Karahanna et al (1999), the intention of continued using technology is determined through (1) the individual's intention to apply technology to work within the next 6 months and (2) that individual will regularly apply technology to work within 6 months. Research by Azwadi et al (2012) identifies the intention of continued applying technology, including (1) intention to continue using the information system; (2) continue using the information systems is a good idea; (3) continue using the information system without going back to the manual system; (4) open up and embrace the new system because it is better than the previous system.

**Research model and research methods**

**Research model and hypotheses**



(Source: Karahanna et al, 1999)

**Fig.1:Research model**

### **Research hypotheses**

- H1:** Perceived usefulness of e-tax by enterprises has a positive effect on attitude toward using e- tax.
- H2:** Ease of use of e-tax has a positive effect on the attitude toward using e-tax.
- H3:** Compatibility has a positive effect on the attitude toward using e-tax.
- H4:** Perceived risk of e-tax has a negative effect on the attitude toward using e-tax.
- H5:** Self-efficacy of enterprises has a positive effect on perceived behavioral control.
- H6:** Favorable conditions have a positive effect on perceived behavioral control.
- H7:** Attitude toward using e-tax has a positive effect on the intention of continued using e-tax.
- H8:** Subjective norm has a positive effect on the intention of continued using e-tax.
- H9:** Perceived behavioral control of enterprises has a positive effect on the intention of continued using e-tax.
- H10:** Perceived voluntariness of using e-tax of enterprises has a positive effect on the intention of continued using e-tax.
- H11:** The characteristics of enterprises make a difference in the intention of continued using e-tax.

### **Data collections and analysis methods**

#### **Secondary data collection and analysis**

The secondary information is from: general reports on online tax declaration and e-tax payment of the General Department of Taxation; reports on e-tax implementation of tax departments; general reports on the e-tax of district tax departments; reports on e-government implementation; World Bank documents on e-government ratings; the information published in magazines, articles, forums, and websites of government agencies on the process of e-government and e-tax implementation.

The study applies trend analysis, cross-sectional analysis, compare groups, interpretation method. Then, summarising to get new information that is suitable for research purposes.

#### **Primary data collection and analysis**

##### **Preliminary qualitative research**

This study conducts 12 semi-structured interviews with tax accountants of enterprises in Hanoi that are directly implementing e-tax declaration and e-tax payment. The sample is taken based on the convenient method but still ensures the reliability as enterprises interviewed from all sectors in the economy, having accountants to be trained, having a different number of employees as well as different sizes. From the semi-structured interviews mentioned above, the research has adjusted the scale in the survey questionnaire. Accordingly, some observations have been added to the scales.

##### **Preliminary quantitative research**

The study conducts preliminary quantitative research through convenient sample selection. Preliminary quantitative research is implemented by direct interviews through survey questionnaires with a small sample. The purpose of the pilot survey is to standardize the questionnaire and adjust the questions in the preliminary survey questionnaire which are built in the previous step. After conducting interviews with accountants from 30 enterprises, the survey questionnaire has been revised.

##### **Formal quantitative research**

The research model has 8 independent variables and 33 observed variables. Thus, the minimum acceptable sample size for regression analysis must be higher than  $8 * 8 + 50 = 114$  questionnaires; the minimum sample size for factor analysis must be higher than  $5 * 33 = 165$  questionnaires. Therefore, 400 questionnaires for enterprises and 400 questionnaires for tax officials were sent. The number of questionnaires obtained is 349 responses from enterprises and 343 responses from tax officials. These results are sufficiently reliable to be compared among groups of enterprises as well as groups of tax officials. In terms of data collection, questionnaires for enterprises are sent to managers or tax accounting officers at enterprises by 4 methods: (1) directly investigating and interviewing with enterprises in Hanoi; (2) sending questionnaires via e-mail, letter to enterprises; (3) directly sending to the General Department of Taxation and tax departments to collect the feedback from enterprises outside Hanoi; (4) sending questionnaires to graduate students working at tax authorities.

##### **Data analysis**

This study applies the reliability analysis, Exploratory Factor Analysis (EFA), and Linear regression analysis to evaluate the impact of the independent variables on the dependent variable and to estimate the research model.

##### **Research sample**

Some descriptive results of the survey sample are summarized as follows:

**Table 1: Field of operation and type of enterprise**

Field	Amount	Ratio %	Type	Amount	Ratio %
Transport construction	93	26.6	Limited Liability Company	112	32.1
Hotel Tourist	85	24.4	Joint stock company	111	31.8
Production and processing of agricultural products and foods	38	10.9	Private enterprise	88	25.2
IT and telecommunications	32	9.2	State-owned enterprises	13	3.7
Textiles, leather and shoes	41	11.7	Foreign enterprises	6	1.7
Pharmaceutical, medical, chemical cosmetics	66	18.9	Joint venture enterprises	8	2.3
Production and processing of aquatic products	23	6.6	Cooperatives, cooperative groups	11	3.2
Finance, banking, insurance	23	6.6			
Crafts	16	4.6			
Other	15	4.3			

(Source: Summary from the survey)

**Table 2: Number of employees and participation level in e-tax training**  
Unit: %

Number of employees	Under 10	From 10 to less than 50	From 50 to less than 100	From 100 to less than 200	From 200 to less than 500	Over 500
		17.5	33.8	30.9	9.2	5.7
Frequency of participating in e-tax training courses	0 times		1 time	2 times	3 times or more	
	4.0		32.1	47.3	16.6	

(Source: Summary from the survey)

The enterprises with 10 to 50 employees (accounting for the largest proportion of 33.8%), followed by the enterprises with the number of employees from 50 to less than 100 employees (accounting for 30.9%), and the enterprises with less than 10 employees (accounting for 17.5%). The number of enterprises with more than 100 employees accounts for a small proportion of the survey sample. Especially, the enterprises with 500 or more employees accounting for 2.9% only. This is relatively consistent with the reality of enterprises.

In terms of frequency of participating in e-tax training courses, the majority of enterprises participate in e-tax training 2 times (accounting for 47.3%), and there is only 4% of enterprises without any training of e-tax.

## RESULTS AND DISCUSSION

### Reliability analysis of Cronbach's Alpha

Analyzing the reliability of the scale is a necessary step to test the internal consistency of the scale developed from the theoretical model using Cronbach's Alpha coefficient. The results of the scale reliability analysis show that two observations PU2, COM4 have no internal consistency with observed variables in the same group and may be considered to be removed from the scale. The Cronbach's Alpha values of the items in the model after removing two observations of PU2, COM4 are all higher than 0.706 which are acceptable in this study. This proves that the primary data collected based on the observed variables have a certain consistency with the factors in the research model.

### Exploratory Factor Analysis (EFA)

EFA analysis results in a reduction of many observed variables into significant factors from collected data. The basis of the reduction in this method is based on the linear relationship of the elements with the observed variables. Hair & et al (2010) point out that EFA is implemented based on a number of conditions to ensure a practical meaning, such as (1) the minimum of Factor Loading must be higher than 0.3; higher than 0.4 is considered "important"; higher than 0.5 is considered "practical meaning" and is a condition for EFA analysis; (2) KMO coefficient (Kaiser- Mayer-Olkin) has to meet:  $0.5 \leq KMO \leq 1$ ; (3) Barlett test is statistically significant (or Sig. < 0.05); (4) The overall variance explains more than 50% of the variation of observed variables (Total Variance Explained > 50%).

The results of the first-factor analysis show that there is an inconsistent observation. That is the observation PU2 which has a loading factor lower than 0.5, so there is little practical meaning. These are also considered factors to be removed from the scale in the reliability analysis. Thus, this factor is excluded from the research model.

The results of the second-factor analysis with the remaining observations show that the observed variables have loading factors higher than 0.5. Thus, the survey results are consistent with the research model theory. This is a premise to reduce observed variables into factors in the model.

The results of the third-factor analysis show that only the observation PU2 "applying e-tax services reduces travel costs for enterprises" is eliminated and the observation COM4 "information infrastructure of enterprises is compatible with the information infrastructure of tax authorities" is included in the scale of FC "Favourable conditions". This change does not affect the meaning of factors from the theoretical model, therefore, the names of factors remain the same as in the theoretical model. The representative value of factors reduced in the model is calculated by means of averaging. This method is commonly used in similar cases.

**Table 3: Rotated component matrix**

	Factor				
	1	2	3	4	5
PU01	.784				
PU03	.771				
PU04	.814				
PU05	.828				
EU1		.806			
EU2		.782			
EU3		.767			
EU4		.816			
COM1				.806	
COM2				.789	
COM3				.814	
COM4			.874		
SE1					.895
SE2					.888
FC1			.878		
FC3			.867		

Extraction method: Principal Component Analysis. Rotation method: Varimax with Kaiser Normalization.  
a. Rotation converged in 5 iterations

( Source: Authors' analysis)

### Correlation analysis

Correlation analysis is used to test the linear relationship between variables. Independent variables have a linear correlation with dependent variables is the basis for implementing linear regression analysis. The analytical

results show that the independent variables have a linear correlation relationship with the dependent variable in the research model with a meaning level less than 0.01. The independent variables are not correlated with each other. This is a good premise for the regression analysis in the next step.

**Regression analysis**

The authors propose a research model equivalent to the following 3 regression equations:

(1)  $AT = \beta_{10} + \beta_{11}.PU + \beta_{12}.EU + \beta_{13}.COM + \beta_{14}.PR$

(2)  $PBC = \beta_{20} + \beta_{21}.SE + \beta_{22}.FC$

(3)  $IT = \beta_{30} + \beta_{31}.AT + \beta_{32}.SN + \beta_{33}.PBC + \beta_{34}.VOL$

**a) Regression analysis of equation (1)**

Equation (1) evaluates the factors affecting the attitude of enterprises regarding the continued application of e-tax (AT) with independent variables: Perceived usefulness (PU), Ease of use (EU), Compatibility (COM), Perceived risk (PR). The model with adjusted R2 = 0.553 shows that the independent factors explain 55.3% of the variation of the dependent variable AT.

The regression results are shown by the following equation:

$AT = 1,696 + 0.378PU + 0.379.EU + 0.381.COM - 0.524.PR$

The results of the coefficient test show that the coefficients of the equation are statistically significant (Sig. <0.05). In which, the factor "Perceived risk " has the highest impact on the dependent variable; followed by the "Compatibility", "Ease of use" and finally the "Perceived usefulness" has the lowest influence on the dependent variable in the regression equation.

**Table 4: Results of regression analysis equation (1)**

Model summary												
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson							
4	.747 <sup>a</sup>	.558	.553	.59905	2.098							
a. Predictors: (Constant), PR, PU, EU, COM												
b. Dependent variable: AT												
ANOVA <sup>a</sup>												
Model		Sum of Squares	df	Mean Square	F	Sig.						
4	Regression	56.056		9.014	08.718	.000 <sup>b</sup>						
	Residual	23.447	44	.535								
	Total	79.503	48									
a. Dependent variable: AT; b. Predictors: (Constant), PR, PU, EU, COM												
Coefficients												
Paradigm		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics		
		B	Std. Error	Beta			Zero order	Partial	Part	Tolerance coefficient	VIF	
4	(Constant)	1.696	.312		5.427	.000						
	PU	.378	.043	.314	8.734	.000	.299	.426	.313	.994	1.006	
	EU	.379	.037	.370	10.327	.000	.343	.486	.370	.998	1.002	
	COM	.381	.034	.400	11.112	.000	.351	.514	.398	.993	1.007	
	PR	-.524	.042	-.453	-12.609	.000	-.436	-.562	-.452	.997	1.003	
Dependent variable: AT												

(Source: Authors' analysis)



**b) Regression analysis of equation (2)**

Results of ANOVA test with Sig. <0.05 shows that the linear model is consistent with equation (2).

Equation (2) evaluates the factors affecting the "Perceived behavioral control" (PBC), with independent variables: Self-efficacy (SE), favorable conditions (FC). The model with adjusted R<sup>2</sup> = 0.395 shows that the independent factors explain 39.5% of the variation of the dependent variable PBC.

The regression results are shown by the following equation:

$$PBC = 0.74 + 0.375.SE + 0.413.FC$$

The results of the coefficient test show that the coefficients of the equation are statistically significant (Sig. <0.05). In which, the factor Favorable conditions (FC) has a higher impact on the dependent variable than the impact of self-efficacy (SE).

**Table 5: Results of regression analysis equation (2)**

Mode summary											
Model	R	R Square	Adjusted R Square			Std. Error of the Estimate	Durbin-Watson				
5	.632 <sup>a</sup>	.399	.395			.63205	1.999				
a. Predictors: (Constant), FC, SE											
b. Dependent variable: PBC (Source: Authors' analysis)											
ANOVA <sup>a</sup>											
Model		Sum of Squares	df	Mean Square	F	Sig.					
5	Regression	91.732	2	45.866	114.813	.000 <sup>b</sup>					
	Residual	138.221	346	.399							
	Total	229.953	348								
a. Dependent variable: PBC											
b. Predictors: (Constant), FC, SE (Source: Authors' analysis)											
Coefficients											
Coefficient											
Paradigm	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics		
	B	Std. Error	Beta			Zero order	Partial	Part	Tolerance coefficient	VIF	
5	(Constant)	.740	.161		4.583	.000					
	SE	.375	.034	.466	11.126	.000	.422	.513	.464	.991	1.009
	FC	.413	.037	.472	11.272	.000	.429	.518	.470	.991	1.009
Dependent variable: PBC											

(Source: Authors' analysis)

c) Regression analysis of equation (3)

**Table 6: Results of regression analysis equation (3)**

Mode summary												
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson							
6	.687 <sup>a</sup>	.472	.467	.49695	2.097							
a. Predictors: (Constant), VOL, PBC, AT												
b. Dependent variable: IT (Source: Authors' analysis)												
ANOVA <sup>a</sup>												
Model		Sum of Squares	df	Mean Square	F	Sig.						
6	Regression	76.069	3	25.356	102.674	.000 <sup>b</sup>						
	Residual	85.201	345	.247								
	Total	161.270	348									
a. Dependent variable: IT												
b. Predictors:: (Constant), VOL, PBC, AT (Source: Authors' analysis)												
Coefficients												
Paradigm		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics		
		B	Std. Error	Beta			Zero order	Partial	Part	Tolerance	VIF	
	(Constant)	.673	.161		4.188	.000						
	AT	.396	.030	.521	13.287	.000	.544	.582	.520	.997	1.003	
	PBC	.148	.033	.176	4.510	.000	.185	.236	.176	1.000	1.000	
	VOL	.271	.028	.380	9.709	.000	.409	.463	.380	.997	1.003	
Dependent variable: IT												

(Source: Authors' analysis)

The regression results are shown by the following equation:

$$IT = 0.673 + 0.396 \cdot AT + 0.148 \cdot PBC + 0.271 \cdot VOL$$

In which, the factors "Attitude toward using e-tax" (AT) and "Perceived voluntary use of census" (VOL) have strong influences on the dependent factor "Intention of continue using e-tax" (IT), followed by the "Perceived behavioral control" (PBC) which has a lower impact level. This model with adjusted R<sup>2</sup> = 0.467 indicates that the independent factors explain 46.7% of the variation of the dependent variable IT.

**Conclusion and implications**

The research results indicate that the perception and attitude of continued applying e-tax of enterprises are at a medium level and positively influenced by the perceived usefulness, compatibility, ease of use of e-tax and negatively affected by the perceived risk of e-tax.

The research results also provide some recommendations to the Government, the Ministry of Finance, enterprises, and stakeholders to promote the application of e-tax in Vietnam.

### **Recommendations on investment and development policy of information technology infrastructure for the tax field and public administration sector**

Derived from the needs of tax officials as well as enterprises, the policy of enhancing the information security system has been researched and enacted with the aim of creating peace of mind for enterprises and tax officials when using e-tax services, especially for enterprises when using e-tax declaration and tax payment services. The specific objective of the policy is to ensure the information security system reaches international standards. To achieve these goals, a number of priority solutions such as (1) building software for information security management; (2) developing a centralized information management system with limited access and operation for different users; (3) building and implementing a disaster prevention center at the General Department of Taxation. Overall, the Government needs to promulgate policies to attract the private sector to participate and invest in the development of IT infrastructure in the public sector in general and the tax field in particular.

### **Recommendations on the policy of supporting and encouraging investment in information technology infrastructure for the private sector**

Firstly, the General Department of Taxation needs to have more active solutions related to technology to support the operation of e-tax services such as: using e-invoices, e-tax refunds, and e-tax inspection procedures for enterprises. Secondly, enterprises include: SMEs, enterprises in the early stages of applying e-tax application, and newly established enterprises should be supported by a policy of one-time support and the cost of maintaining digital signatures. This cost is not an issue for large enterprises but it is a significant expense (about 1,500,000 VND/year) for SMEs. Thirdly, the Government should issue policies to support enterprises in applying IT in the adoption of e-public administrative services in general and e-tax in particular. Fourthly, the Government should have policies to invest and develop the internet infrastructure, upgrade public IT infrastructure, strongly cover remote areas in order to develop the use of e-tax services in the near future.

### **Recommendations on the policy of improving applying information technology capacity**

For enterprises, expanding the category of enterprises that get benefits from e-tax training policies, especially the expansion of small and medium-sized enterprises that are enterprises with knowledge of tax and IT application in the process of compliance with tax obligation. Engaging local tax officials with e-tax training staff to become trainers for enterprises in their locality. Each tax official who manages tax filing is responsible for disseminating skills to effectively apply e-tax. Ensuring preferential policies for tax officials to motivate them to guide and support the implementation of tax services for enterprises.

### **Recommendations on propaganda and advocacy**

Implementing e-tax propaganda and advocacy programs. The program includes specific forms of e-tax propaganda. The project of e-tax propaganda can be used for small and medium-sized enterprises that usually have difficulties in applying e-tax. The project of e-tax propaganda focuses on enterprises in remote and deep locations that have little access to e-tax information. The project propagates the benefits of e-tax with activities to disseminate the situations in comparison with traditional tax. The project to diffuse new e-tax services and their benefits.

### **Recommendations on consulting and supporting**

Technical support groups should be established at the tax department level to assist both enterprises and tax officials in the case of technical difficulties in e-tax implementation. Besides, local tax departments cooperate with technical departments of commercial banks to help customers pay e-tax in the case of problems in e-tax transactions. Moreover, tax authorities should issue a set of manuals for using e-tax services to specifically guide enterprises, especially in the case of developing new e-tax services. The set of manuals need to be detailed for each e-tax service.

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