EVALUATION OF BUSINESS SATISFACTION WITH ELECTRONIC TAX DECLARATION SERVICES: A CASE STUDY OF ENTERPRISES IN HA NOI CITY, VIETNAM

BY

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Abstract

Nowadays, regional economic integration and interconnection towards globalization is an inevitable trend. Consequently, the international integration of taxation is also enhanced to stimulate investments and trade liberalization in the region and around the world. Along with the rapid advancement of information technology and the Internet, government administrative tasks, particularly tax management, have undergone remarkable reforms with significant breakthroughs. The tax industry has increasingly broadened its support for taxpayers across all tax services. Amidst these reforms, electronic tax declaration is one of the most innovative and noteworthy initiatives. This paper aims to (1) identify the factors influencing business satisfaction with the electronic tax declaration services of tax departments, and (2) measure the impact of each factor on business satisfaction with electronic tax declaration services of tax departments.

Keywords: Satisfaction, tax declaration, tax department, tax declaration support, electronic tax declaration.

INTRODUCTION

1. Research model and hypotheses

The theoretical model for evaluating taxpayer satisfaction levels was constructed utilizing the SERVQUAL model and scale. In this model, variables were added and substituted to align more effectively with the service industry within the public sector and the tax sector. The research model is depicted in Figure 1 as follows:
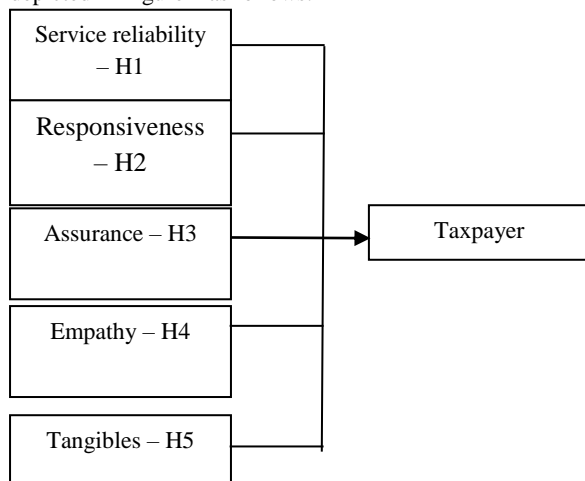

Figure 1. Theoretical research model

Reliability: Electronic tax declaration represents an electronic transaction conducted between an enterprise and a tax department, serving as a public service offered to civilized taxpayers in modern society according to tax laws. Through electronic tax declarations, taxpayer information and data are efficiently and accurately filled out, minimizing errors, as the Tax Declaration Support (abbreviated as HTKK in Vietnamese) application aids in calculations and verifies for inadvertent mistakes during the tax declaration process.

Responsiveness: As the electronic tax declaration system is recently developed, certain enterprises may face challenges in utilizing this service. This is attributed, in part, to a limited understanding of the service and a lack of information technology implementation in the tax declaration process. Moreover, existing mechanisms and policies lack comprehensive legal documentation delineating responsibilities concerning the utilization and safeguarding of digital certificates, as well as the archiving of electronic tax declaration papers.

Assurance: One of the key benefits of electronic tax declaration (e-tax declaration) is information security, as the tax departments' electronic declaration form reception system

is designed using modern and advanced technologies to ensure the safety and security of taxpayers' information.

Empathy: E-tax declaration services are executed through the Internet. Notably, the Internet is a two-way communication medium according to Li et al. (2001). Therefore, these services involve interactions between taxpayers and tax departments in service consultancy and support, which allows tax departments to understand the specific needs of taxpayers to adjust the e-tax declaration mechanisms and policies in line with the taxpayers' requirements, thereby enhancing overall taxpayer satisfaction.

Tangibles: There are two methods available for completing e-tax declarations: (1) Online electronic tax declaration on the tax department's portal (website: thuedientu.gdt.gov.vn): taxpayers access their e-tax transaction accounts, perform an online tax declaration on the tax department's portal and submit e-tax papers to the tax department. (2) Electronic tax declaration using tax support applications and tools (HTKK application).

On that basis, the hypotheses were formulated as follows:
Hypothesis H1: When taxpayer perception of the reliability of the e-tax declaration services improves or diminishes, their service satisfaction also improves or diminishes accordingly. A comprehensive understanding of the superior benefits of e-tax declaration will improve business satisfaction with this service.

Hypothesis H2: When taxpayer perception of the responsiveness of the e-tax declaration services improves or diminishes, their service satisfaction also improves or diminishes accordingly. Simple, understandable, easy-to-follow procedures and prompt, timely guidance will improve business satisfaction with this service.

Hypothesis H3: When taxpayer perception of the assurance of the e-tax declaration services improves or diminishes, their service satisfaction also improves or diminishes accordingly. High safety and security of enterprises' information will improve business satisfaction with this service.

Hypothesis H4: When taxpayer perception of the empathy of the e-tax declaration services improves or diminishes, their service satisfaction also improves or diminishes accordingly. High interactivity and support between taxpayers and the tax department will improve business satisfaction with this service.

Hypothesis H5: When taxpayer perception of the tangibles of the e-tax declaration services improves or diminishes, their service satisfaction also improves or diminishes accordingly. A user-friendly website design with many useful functions for e-tax declaration will improve taxpayer satisfaction with this service.

2. Research methods

- Qualitative method: The authors engaged in interviews, discussions, and conversations with representatives of the city's tax department leadership, officials directly responsible for tax declaration and accounting tasks, and enterprises offering consultant services on the e-tax declaration. The objective was to refine and enhance the scale used to measure the quality of e-tax declaration services.

- Quantitative method:
Survey samples: A survey was conducted on 300 enterprises engaged in production and business activities in Ha Noi City, Vietnam.

Survey method: Online survey forms were sent to these enterprises through email.

Survey Tools: Questionnaires were employed to collect information regarding the satisfaction with e-tax declaration services of enterprises engaged in production and business activities in Ha Noi City, Vietnam. The questionnaires consist of 24 observed variables categorized into 5 factors. In details:

> TC factor consists of 5 observed variables
> DU factor consists of 3 observed variables
> DB factor consists of 4 observed variables
> DC factor consists of 3 observed variables
> PT factor consists of 9 observed variables

In this paper, the variable of business satisfaction with e-tax declaration services was depicted by 3 observed variables.
Enterprise satisfaction with e-tax declaration services was measured using a five-point Likert scale. 1 – strongly disagree; 2 – disagree; 3 – neutral; 4 – agree and 5 – strongly agree.

Analysis methods: The analysis was made based on the results of the survey on enterprises performing e-tax declaration engaged in production and business activities in Ha Noi City, Vietnam. The collected information from the survey was processed using SPSS 22.0 software. The scale was tested using the reliability coefficient Cronbach's alpha, and the Exploratory Factor Analysis (EFA) and regression analysis were performed for model validation.

3. Research results

Out of the 300 survey forms distributed to businesses, 289 returned forms were considered valid as they contained complete responses. The data from the survey on the agreement levels of enterprises underwent processing of SPSS software. Subsequently, further analysis and organization were conducted using Excel spreadsheets. The ensuing results are presented below.

3.1. Testing the scale
The scale used to measure taxpayer levels of satisfaction with e-tax declaration services consisted of 24 observed variables and was tested using two key tools: The reliability of the scale was tested with the Cronbach's alpha coefficient and the convergence of the factors was measured with Exploratory Factor Analysis.

Reliability coefficient Cronbach's alpha

Based on the results, independent variables, and dependent variables had Cronbach's alpha coefficients exceeding 0.6, and the corrected item-total correlation coefficients were above 0.3. Consequently, these variables were proven reliable and suitable for further analysis.

Table: Cronbach's alpha coefficients of independent variables and dependent variables

Variables	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1. TC: 0.908				
TC1	17.42	5.308	.713	.899
TC2	17.27	5.140	.829	.877
TC3	17.20	4.892	.745	.894
TC4	17.27	5.125	.847	.874
TC5	17.60	4.801	.744	.896
2. DU 0.882				
DU1	7.78	2.616	.783	.823
DU2	7.99	2.378	.784	.824
DU3	7.54	2.728	.752	.850
3 DB 0.901				
DB1	11.78	5.393	.860	.842
DB2	11.74	5.743	.892	.828
DB3	11.80	6.476	.816	.861
DB4	11.75	7.264	.574	.938
4 DC 0.890				
DC1	7.60	2.046	.697	.927
DC2	7.69	2.014	.792	.838
DC3	7.69	2.036	.883	.767
5 PT 0.919				
PT1	29.60	28.849	.793	.906
PT2	29.60	28.530	.765	.907
PT3	29.45	29.980	.619	.916
PT4	29.60	28.030	.788	.905
PT5	29.81	27.333	.761	.907
PT6	29.64	28.522	.734	.909
PT7	29.87	27.697	.715	.910
PT8	29.55	28.517	.695	.911
PT9	29.39	30.140	.572	.919

6. HL: 0.876				
HL1	7.83	1.924	.814	.779
HL2	7.97	1.739	.783	.809
HL3	7.77	2.123	.698	.879

Source:

Exploratory Factor Analysis

It is observed from analysis results that the KMO coefficient was 0.764 and the Bartlett test's significance was below 0.05, hence observed variables of each factor were proven inter-correlated and appropriate for factor analysis. 24 observed variables were categorized into 5 factors with the total variance explained of 73.452, suggesting that the extracted factors accounted for 73.452%. All observed variables were proven reliable, and the actual data conformed to the theoretical research model as the Factor loading coefficients of all variables were above 0.5.

Table 2: Rotated Component Matrix

Rotated Component Matrix^a

	Component				
	1	2	3	4	5
PT4	.841				
PT1	.802				
PT6	.768				
PT3	.756				
PT2	.754				
PT5	.754				
PT7	.744				
PT8	.617				
PT9	.533				
TC4		.860			
TC2		.846			
TC3		.844			
TC5		.753			
TC1		.709			
DB2			.938		
DB1			.929		
DB3			.923		
DB4			.669		
DC3				.871	
DC2				.850	
DC1				.785	
DU1					.870

DU3					.840
DU2					.755

KMO Measure: 0.764

Bartlett's test significance: 0.000

Total Variance Explained: 73.452

3.2. Evaluation of taxpayer satisfaction with the quality of electronic tax declaration services

3.2.1 Evaluation of the Overall Satisfaction

Based on the survey findings, the average score was 3.9285, surpassing the scale's midpoint of 3 (on a five-point Likert scale), indicating a significant impact of e-tax declaration services on taxpayers.

3.2.2 Evaluation of reliability satisfaction

Results revealed an average score of 4.2893 for satisfaction with service reliability, signifying a relatively high level of business satisfaction. Taxpayers generally recognized the superior benefits of e-tax declaration compared to traditional methods. This is also a positive signal, indicating that future forms of e-tax declaration services can be easily accepted. However, a portion of taxpayers did not perceive the utility of these services.

3.2.3 Evaluation of responsiveness satisfaction

The survey indicated an average score of 3.9492 for satisfaction with service responsiveness, suggesting that enterprises were reasonably satisfied. Published e-tax declaration procedures and processes, as well as timely result returns, were identified as contributors to increased taxpayer satisfaction.

3.2.4 Evaluation of Assurance Satisfaction

Survey results showed an average satisfaction score of 4.0424 for service assurance, reflecting an acceptable level of satisfaction. Taxpayers were generally satisfied with information confidentiality and data security during e-tax declaration, although some expressed less than full satisfaction.

3.2.5 Evaluation of empathy satisfaction

The survey indicated an average satisfaction level of 3.8293 for service empathy, suggesting that enterprises were quite satisfied. Understandable, detailed, and timely guidance, alongside the respectful manner of tax officials to taxpayers encountering issues with e-tax declaration, partly improved taxpayer satisfaction. Tax departments progressively improved interactivity between tax officials and taxpayers, embodying the slogan "Always listening to taxpayers", thereby fostering a positive image of a modern public administration system.

3.2.6 Evaluation of Tangible Satisfaction

The average satisfaction level with service tangibles scored 3.7105, indicating an acceptable level of business satisfaction. The efficiency of this tax declaration form was notably attributed to the user-friendly e-tax declaration website's interface along with its useful functions.

However, there were a number of feedbacks in the in-depth questionnaire section, mainly concerning tangibles as follows:

On peak days, the data transmission network experienced congestion. The overflowing pages of the printing version increased costs for printing hard copies for storage.

The timing of upgrades and updates did not align closely with report submissions.

The purchase and sale list was not included in the VAT declaration form, posing risks of buyers using unregulated invoices if sellers failed to provide invoices. There should be upgrades to support online submission of more tax declaration and tax-exempt forms.

3.3. Test the research model using multiple regression analysis

Referring to the regression analysis results, the adjusted R-squared coefficient was 0.760. This indicated that reliability, responsiveness, assurance, empathy, and tangibles collectively accounted for 76.0% of the variance in variables representing the satisfaction with e-tax declaration services of enterprises located in Ha Noi city, Vietnam. The significance level of the model test was below 0.05, confirming the significance of the regression analysis model in this research. All independent variables demonstrated a significant impact on the satisfaction with e-tax declaration services of enterprises in Ha Noi City, Vietnam, with statistically significant regression coefficients and no multicollinearity problem.

Table 4: Statistics of each variable in the equation

		Unstandardized Coefficients		**Standardized Coefficients**			**Collinearity Statistics**	
Model		**B**	**Std. Error**	**Beta**	**t**	**Sig.**	**Tolerance**	**VIF**
1	(Constant)	-.288	.164		-1.757	.080		
	RELIABILITY	.165	.047	.158	3.489	.001	.409	2.444
	RESPONSIVENESS	.100	.045	.097	2.230	.027	.437	2.286
	ASSURANCE	.113	.039	.102	2.898	.004	.675	1.482

EMPATHY	.530	.039	.552	13.539	.000	.502	1.994
TANGIBLES	.169	.035	.164	4.841	.000	.725	1.379

a. Dependent variable: SATISFACTION

Adjusted R-squared: 0.760

F: 183.188;

Significance F: 0.000

In Table 4, the regression coefficients for independent variables were positive (+), signifying a positive correlation with the satisfaction of enterprises in Ha Noi City, Vietnam. Consequently, hypotheses H1, H2, H3, H4, and H5 were all acceptable in this research.

Standardized regression coefficients were employed to assess the impact of these factors on the satisfaction of enterprises operating in Ha Noi City, Vietnam. Accordingly, empathy was the most influential factor with a standardized regression coefficient of 0.552. The impact of other factors was respectively represented as follows: tangibles – 0.164; reliability – 0.158; assurance – 0.102 and responsiveness – 0.097.

4. Conclusions

The tax industry in Vietnam is actively undergoing reforms to establish a modern, productive, and effective system, with a primary focus on enhancing tax management to elevate the quality of services and achieve the highest levels of taxpayer satisfaction. A key objective of not only tax management but also the whole tax industry is the widespread application of information technology (IT), encompassing electronic tax systems and electronic government systems to enhance service quality for both individuals and enterprises. The adoption of the e-tax declaration service aligns with the broader development of the information technology industry and the economy as a whole. Taxpayer satisfaction is pivotal for fostering tax legal compliance and building loyalty to tax departments, hence contributing to increased efficiency of tax management. Notably, the pursuit of improved e-tax declaration services necessitates collaborative efforts not only from tax departments but also from the broader society, administrative agencies, and, crucially, the enterprises directly utilizing the service.

APPENDICES

Symbols of variables in the scale before data processing.

No.	Symbol	Survey questions for reference
A. Reliability		
01	TC1	E-tax declaration reports are highly legitimate as they strictly adhere to tax laws.
02	TC2	E-tax declaration provides a faster and more convenient alternative (eliminating limitations on the submission place and time).
03	TC3	E-tax declaration is time-saving (avoiding traffic congestion, queuing time) and cost-effective (minimizing form printing and travel costs).
04	TC4	E-tax declaration enables taxpayers to monitor the progress of their tax report submission.
05	TC5	With e-tax declarations, taxpayer information and data are efficiently and accurately filled out, minimizing errors.
B. Responsiveness		
01	DU1	Procedures and processes for e-tax declaration are transparently published by tax departments.
02	DU2	Tax officials provide guidance and promptly address questions from taxpayers during e-tax declaration.
03	DU3	A confirmation notice is promptly sent after-tax report submission via the Internet.
C. Assurance		
01	DB1	Information and data during e-tax declaration is secured through digital signatures.
02	DB2	Online tax reports are secured through a mail system that automatically sends confirmation notices after-tax report submission.
03	DB3	Taxpayers feel confident in using the e-tax declaration service.
04	DB4	Digital signatures are automatically verified by the e-tax declaration system.
D. Empathy		
01	DC1	Tax officials are proficient in utilizing the e-tax declaration website for swift information receipt and response.
02	DC2	Tax officials provide instructions on e-tax declaration services in a polite, proper, and eager manner.
03	DC3	Tax officials always listen to and satisfactorily address taxpayers' complaints regarding e-tax declaration services.
E. Tangibles		
01	PT1	The e-tax declaration website features a user-friendly interface.

02	PT2	The e-tax declaration website employs harmonious colors and clear, easy-to-read text fonts.
03	PT3	The e-tax declaration website is easy to use.
04	PT4	The e-tax declaration website is easily accessible.
05	PT5	The e-tax declaration website has a high data transmission speed.
06	PT6	Links on the e-tax declaration website are easily accessible.
07	PT7	The tax report reception portal for e-tax declaration is not overloaded near submission deadlines.
08	PT8	The incurred costs of e-tax declaration services are reasonable and appropriate.
09	PT9	The HTKK app is user-friendly for creating a declaration form and is regularly updated in accordance with current tax policies.
F. Satisfaction		
01	HL1	You are fully satisfied with the convenience, swiftness, and promptness of e-tax declaration services.
02	HL2	You are fully satisfied with the e-tax declaration guidance, support, and inquiry responses.
03	HL3	You are fully satisfied with the information safety and security of e-tax declaration services.

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