

# An Examination of Small and Medium Enterprises (SMEs) Satisfaction toward E-Tax Filing in Thailand

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## Abstract

An e-tax filing website is the important services that Thailand's e-government has proposed for Thai citizens. Ease and reduction of paper works of person in the organization is the policies of the Revenue Department agency of Thailand. In addition, offering facilities and satisfaction in the service is an important policy that the government tries to make up for service users. The revenue department determines tax policy to stimulate and restore the country's economy according to the organization's mission. This research aim to seek the elements that are independent variables that consists of information quality, system quality, service quality and trust, including the dependent variable satisfaction. The demographic elements have measured satisfaction on e-tax filing of SMEs. In this research, descriptive research applied the survey method to collect the data. The data has been collected from 415 respondents who are in four types of business that consist of industries, services, wholesales and retails in Bangkok and its vicinity. Convenience sampling has used for sampling procedure. SEM has used to test the hypotheses and the results have been found that information in relevance and understanding, system quality in ease of use, service quality in tangibility, and trust had significant relationship with satisfaction on e-tax filing. In addition, ANOVA an t-test were

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used to measure the relationship between demographic variable and satisfaction. The results have been found that the difference of gender, and kind of business did not have relationship with satisfaction. On the other hand, different of ages, incomes and education levels had relationship with satisfaction on e-tax filing.

**Keywords:** Satisfaction, Small and Medium Enterprises (SMEs), E-Tax Filing

## การศึกษาความพึงพอใจของธุรกิจขนาดกลางและ ขนาดย่อมในการยื่นชำระภาษีผ่านระบบอินเทอร์เน็ต ในประเทศไทย

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### บทคัดย่อ

การชำระภาษีผ่านระบบอินเทอร์เน็ตเป็นบริการที่มีความสำคัญสำหรับรัฐบาลไทยที่นำเสนอต่อประชาชน ความง่ายต่อการใช้งานและการลดปริมาณการใช้กระดาษในองค์กรเป็นนโยบายสำคัญของ กรมสรรพากรในประเทศไทย นอกจากนี้ การอำนวยความสะดวกและสร้างความพึงพอใจในการใช้บริการเป็นนโยบายสำคัญที่รัฐบาลพยายามสร้างให้เกิดขึ้นกับผู้ใช้บริการ โดยกรมสรรพากรมีนโยบายภาษีเป็นพันธกิจหลัก ในการกระตุ้นและฟื้นฟูเศรษฐกิจของประเทศ วัตถุประสงค์ของการวิจัยครั้งนี้เพื่อศึกษาปัจจัยด้านคุณภาพของข้อมูล คุณภาพของระบบ คุณภาพการบริการ ความไว้วางใจที่มีต่อความพึงพอใจในการยื่นชำระภาษีผ่านระบบอินเทอร์เน็ตของผู้ใช้บริการ ผู้วิจัยทำการศึกษาคู่มือประชากรศาสตร์ซึ่งเป็นกลุ่มธุรกิจขนาดกลางและขนาดย่อมจำนวน 415 คน โดยใช้วิธีวิจัยเชิงพรรณนาและใช้แบบสอบถามเป็นเครื่องมือในการวิเคราะห์ข้อมูล กลุ่มธุรกิจประกอบด้วย การผลิต บริการ ผู้ค้าส่งและค้าปลีกในกรุงเทพฯ และปริมณฑลโดยใช้วิธีการสุ่มตัวอย่างแบบสะดวก วิเคราะห์ข้อมูลโดยใช้โมเดลสมการโครงสร้างเพื่อทดสอบสมมติฐานการวิจัย ผลการวิจัย พบว่า คุณภาพของข้อมูลด้านความสัมพันธ์ ความเข้าใจ คุณภาพของระบบด้านความง่ายต่อการใช้ คุณภาพการบริการด้านลักษณะทางกายภาพ รวมทั้งความไว้วางใจมีความสัมพันธ์ต่อความพึงพอใจในการใช้ นอกจากนั้น ผลการวิจัย พบว่า ความแตกต่างด้านเพศ และความแตกต่างของประเภทของธุรกิจขนาดกลางและขนาดย่อมไม่มีความสัมพันธ์ต่อความพึงพอใจ แต่ความแตกต่างของอายุ ระดับการศึกษา และรายได้มีความสัมพันธ์ต่อความพึงพอใจในการยื่นชำระภาษีผ่านระบบอินเทอร์เน็ต

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## Introduction

Public service is the main mission of government agency, a lot of users show the success of the agency's service. E-government is the service that government offered to public for transaction convenience and reduction paper works. e-tax filing is the system for tax filing via the website which the government offered to citizens. Revenue Department of Thailand has adopted taxation via the website (called e-revenue) for serving to taxpayers. Since the authorities introduced the e-tax filing in 2001, starting from Value Added Tax (VAT) and then expanded to other taxes, but the number of users does not increase as expected. Although, this agency tries to increase the number of users by offering the benefit such as receiving tax return faster. This study focuses to explore the opinions of e-tax filing users' satisfaction in the quality dimensions of SMEs business usage which consists of industrial business, service business, wholesale business and retail business. SMEs is the big group business in Thailand which created revenues of 85% and generates 75% of employment for the country. Thailand's government try to support this business in terms of investment and marketing for expansion. Therefore, increasing the number of taxpayers are shown the potential of e-tax filing service.

According to DeLone and McLean (2003: 3-30), the benefits of the technology usage can create satisfaction and intention to use. They cited that information quality, system quality and service quality bring about user's intention. Many researchers study the elements of satisfaction and intention to use the websites. Islam et al. (2012: 6447-6455) cited that users' satisfaction on e-tax filing has influenced on user's perception. Building the confidence in tax payment transaction processes within taxpayer perception is able to increase intention to use e-tax filing (Agus et al., 2007: 177-190). Therefore, public official should create confidence in trustworthiness and honesty on website's transaction (Agus et al., 2007: 177-190). In addition, easiness of e-tax filing usage, website design, empathy and tangibility of service providers were important elements which have an influence on satisfaction (Pinho et al., 2007: 154-157). If service users have satisfied in e-service quality, they will continue to use (Al-kasasheh et al., 2011). Besides, relevance of information in each webpage, accuracy of information, understanding and completeness of information have generated interest to access (Wangpipatwong et al., 2009: 19-35). In addition, Goh et al. (2012: 2088-5342) confirmed that reliability and responsiveness on e-tax filing system were the most important elements for accessing the websites of taxpayers.

As mentioned above, the objectives of this study have presented as followed:

1. To investigate the factors which influence satisfaction on e-tax filing (e-revenue) of Small and Medium Enterprise in Bangkok and the vicinities of Bangkok.
2. To understand the factors which influence satisfaction on e-tax filing (e-revenue) that lead to develop e-tax filing website consistency with the requirement of service users.

The procedure of the study is organized as follows: first, the researcher review the existing literature on the constructs of satisfaction on e-tax filing usage, information quality, system quality, service quality and trust. Second, the study has discussed the research methodology used in the study as well as the survey instrument used in the data collection. Finally, the study has presented the result of the analysis followed by the conclusion and discussion.

## Literature Review

### Satisfaction on e-tax filing

Satisfaction has been used to measure in marketing context, it is the feeling to get a response before purchasing and after receiving the products or services (Oliver, 1980: 466-469; Zeithaml et al., 1996: 31-46). Kotler (2000) illustrated that satisfaction is the person's sentiment within the comparison between perception and experience in product performance. Later, Parker and Mathews (2001: 38-44) defined that satisfaction means reaction about the emotion which is the result of the evaluation process based on knowledge and experience. In e-service context, Pinho et al. (2007: 154-157) concluded that the feeling of taxpayer's satisfaction on e-tax filing means the taxpayer who passed the great experience of e-tax processing. In this study, satisfaction is concerned with the feeling of taxpayer in using e-tax filing website. Information quality, system quality, service quality and trust are used to measure the level of taxpayer's satisfaction.

### Information quality in terms of relevance, accuracy, understanding and satisfaction

DeLone and McLean (1992:60-95) conducted the succession of information and technology model. They defined information quality concerned with the measurement of the information that the system provides to service users. Lai and Pires (2010: 35-46)

defined accuracy of information on the website is the correct details which meet the users' requirement. They confirmed that relevance and accuracy of information on the website have a critical influence on users' satisfaction. In addition, Hussein et al. (2011: 225-248) quoted that understanding of information on the website which is clear and easy to read could affect satisfaction. Pinho et al. (2007: 154-157) defined relevance of e-tax filing information as the information links to each webpage. The information is connected on the webpage, made its ease of finding which is the main reason of intention to use of service users.

Furthermore, Wongpipatwong et al. (2009: 19-35) applied D&M IS model for constructing their model and explained that relevance, accuracy, understanding, timeliness and completeness of information were important elements which have an influence on the continuation and intention to use e-government. If the website has contained comprehensive information, it should influence on user's decision to use the website (Pikkarainen et al., 2004: 224-235). Moreover, Maditinos and Theodoridis (2010: 312-329), Kassim and Abdullah (2010: 351-371) determined the context of e-service satisfaction. They described that sufficiency, update, relevance and easy understanding of information were the critical elements which relate to satisfaction on e-service usage. Saha et al. (2012: 300-321) indicated that timely and comprehensive information of e-tax filing usage relates to user's satisfaction. If the information on website of e-commerce are clear and understandable, it has been satisfied by the users. (Kassim and Abdullah, 2010: 351-371). Based on the previous studies, the researcher has come up with the following hypotheses.

- H1a: There is a relationship between information quality in terms of relevance and satisfaction on e-tax filing.
- H1b: There is a relationship between information quality in terms of accuracy and satisfaction on e-tax filing .
- H1c: There is a relationship between information quality in terms of understanding and satisfaction on e-tax filing.

### **System quality in terms of function, usefulness, ease of use and satisfaction**

System quality has concerned with the measure of the system's outputs. When applied in this study, system quality is the efficiency of website that links to its function, usefulness, and ease of use. Various researchers such as Wongpipatwong et al. (2009: 19-35), Pinho and Macedo (2008: 177-193) and Jun et al. (2004: 817-840) defined system quality in any fields.

Wongpipatwong et al. (2009: 19-35), who study the quality of e-government in Thailand. They defined function quality means the required functions which are available in the system. DeLone and McLean (1992: 60-95) defined function quality is the quality of the system responsive. Speed and downloading are also important factors indicated e-service website quality (Chong et al., 2010: 267-287). Usefulness from using the website as an incentive to use e-service of users (Wongpipatwong et al., 2009: 19-35). Pinho and Macedo (2008: 177-193) defined usefulness of using the website as the websites which can be accessible at any time. Moreover, Wongpipatwong et al., 2009: 19-35; Almahamid et al., 2010: 30-44; Chong et al., 2010: 267-287 also confirm that usefulness from using the website are saving time and cost. Islam et al. (2012: 64476455) determined usefulness as the benefits of users' perception toward e-tax filing service. Usefulness from using the system is able to enhance job productivity and job performance of users (Ambali, 2009: 249-266; Sang et al., 2010: 517-534). Therefore, creating perceived on the benefits and easiness of e-tax filing among taxpayers, can make them intend to use (Hussein et al., 2011: 225-248).

Jun et al. (2004: 817-840) described ease of use of the system as ease of navigation, fine organization and untroubled transaction processes. Goh et al. (2012: 2088-5342), Pinho and Macedo (2008: 177-193) and Wong et al. (2014: 477-502) cited that the utilities, ease of use and simple processing of e-tax filing transaction service are important to users' satisfaction. In e-banking context, Chong et al. (2010: 267-287) found that usefulness of e-banking service in terms of increasing job productivity is an important elements which influences on users' satisfaction. Herington and Weaven (2009: 1220-1231) cited that operation on the website is able to use easily and download quickly which are essential in high level on satisfaction of service users. Ojha et al. (2009: 65-90) evaluated e-tax filing

usage of young India, they found that ease of use is an important element of intention to use of taxpayers. Chen et al. (2008: 296-312) applied technology acceptance model (Venkatesh and Davis, 2000: 425-478) for constructing an e-service research intention model and they found that perceived ease of use is an important elements which has an influence on intention to use e-service. Moreover, Saha et al. (2012: 300-321) and Lee et al. (2008: 842-859)

studied the elements affecting e-tax filing context. The results of their study has concluded that users prefer the website because of fast access, high download speed and ease of use. Herington and Weaven (2009: 1220-1231) cited that accessibility and run at any time are important for decision to use e-service of user. The empirical study of Lai and Pires (2010: 35-46), clearness of navigation of the systems was an essential elements which brought about e-government websites usage. Meanwhile, Alomari et al. (2012: 207-234) described that the benefits offered on e-government service in terms of saving time and quick running transactions affect a change in satisfaction. In addition, quick loading and complete running transactions via the website have an influence on opinion of customers and create satisfaction on e-commerce (Lee and Lin, 2005: 161-176).

Furthermore, Ojha et al. (2009: 65-90), Kassim and Abdullah (2010: 351-371) cited that service users needed easy understanding of the operation on websites. Cristobal et al. (2007: 317-340) implied that the system showed confirmation acceptance, which significantly affected customer satisfaction for both purchasing and searching on the websites. The website has been designed to meet the need of users, it contributes to the success in increasing the number of users (Santos, 2003: 233-246). Islam et al. (2012: 6447-6455) suggested that increasing e-tax filing satisfaction, the department must improve the technology system about usefulness, ease of use and facilities. From various researches, the researcher has come up with the following hypotheses.

H2a: There is a relationship between system quality in terms of function and satisfaction on e-tax filing.

H2b: There is a relationship between system quality in terms of usefulness and satisfaction on e-tax filing.

H2c: There is a relationship between system quality in terms of ease of use and satisfaction on e-tax filing.



### Service quality in term of tangibility, reliability, empathy and satisfaction

Service quality refers to quality of personal service contribution to citizens via e-service websites, such as answering questions and providing complicated solutions to citizen's problems (Wongpipatwong et al., 2009: 19-35). Many researchers define the service quality in various fields. Wongpipatwong et al. (2009: 19-35) defined tangibility as the enthusiasm of service provider in answering and solving the problem via phone, e-mail and Web-board towards service users. Empathy is the individualized attention of service provider toward customers. Jun et al. (2004: 817-840) defined reliability of service as service provider can build credibility quick response and ability to perform under the contracting. Parasuraman et al. (1989: 41-50), cited that empathy referred to the creating in understanding, easy access and ability of communication between service providers and service users. Pinho et al. (2007: 154-172) suggested that service quality and satisfaction are critical matters that concern with intention to use the websites of users. Service quality was used to evaluate the potential of e-service website in previous research. Pinho and Macedo (2008: 177-193) studied satisfaction on e-tax filing usage and found that security, responsiveness, reliability, empathy, including tangibility are essential elements have an influence on satisfaction on e-tax filing. Wangpipatwong et al. (2009: 19-35) evaluated e-government usage of Thai citizens by applying SERVQUAL of Parasuraman et al. (1989: 41-50) for conducting their model and found that service quality in terms of tangibility, reliability, empathy, responsiveness and assurance of the website relationship with continuation usage. In addition, Wong et al. (2008: 526-545) conducted quality of e-banking context and they implied that assurance, tangibility, reliability, responsiveness, and empathy are significant elements which influence on user's perception. Furthermore, Agus et al. (2007: 177-190) implied that service quality about tangibility, reliability and responsiveness are positively related to service user's satisfaction. Jun et al. (2004: 817-840) cited that reliable and prompt responses are significant elements affecting customer satisfaction. Islam et al. (2012: 6447-6455) developed e-tax filing model and found that trust building of service providers had relationship with user's satisfaction.

Moreover, Ganguli and Roy (2011: 168-198), Yaya et al. (2011: 1194-1213) identified service quality of technology-based banking and found that reliability had relationship with customer's satisfaction. Consistent with the study of Shirzad and Beikzad (2014: 55-61), reliability in e-banking service is an important element of customer satisfaction.

In addition, ability of service providers to solve the problems is an important which influences on customer satisfaction on e-banking services (Roche, 2014: 1-8). In addition, Lee and Lin (2005: 161-176) cited that fast responsiveness of service provider is important elements of service user satisfaction. Similarly, Sambasivan et al. (2010: 169-187) mentioned that service quality is an important which affected satisfaction of service user. If service providers offer slow response, service users will not satisfy (Lee and Lin, 2005: 161-176). By applying the results of previous research studies the researcher has come up with the following hypotheses.

H3a: There is a relationship between service quality in terms of tangibility and satisfaction on e-tax filing.

H3b: There is a relationship between service quality in terms of reliability and satisfaction on e-tax filing.

H3c: There is a relationship between service quality in terms of empathy and satisfaction on e-tax filing.

### **Trust and satisfaction**

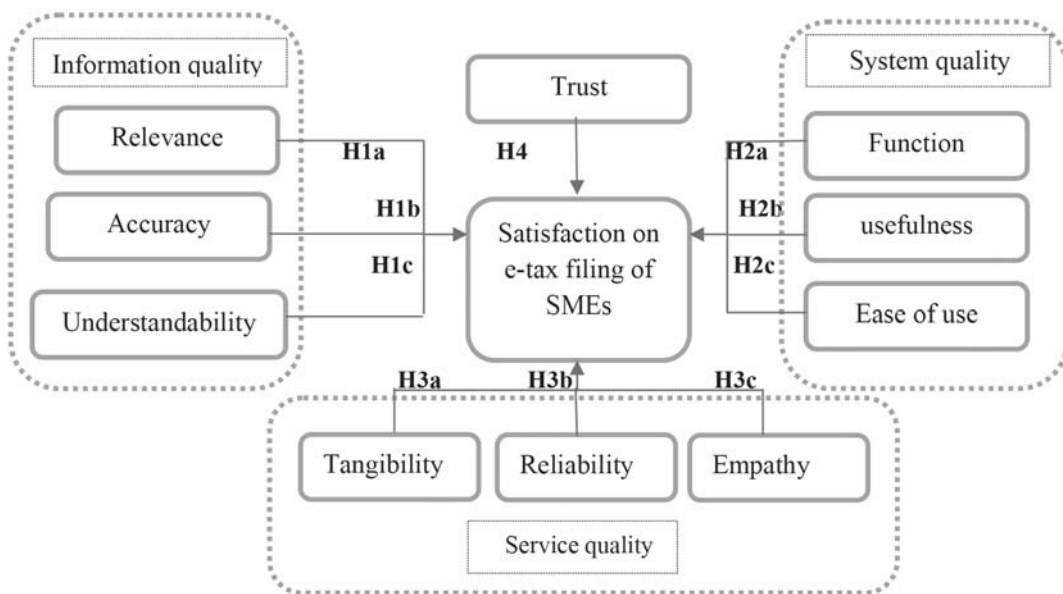
Trust is the person's beliefs about keeping the privacy of service providers (Chong et al., (2010: 267-287). Trust has been defined by researchers in various fields. Cater (2008: 147-161) defined trust as the confidence in personal information of service users that service providers show it via the internet, because transaction security of information is important. Lee and Lin (2005: 161-176) developed SERVQUAL (Parasuraman et al., 1989: 41-50) and trust (Kimery and McCard, 2002: 63-82) to integrate e-service quality dimension in their context. They found that trust on the website is the key element of customer satisfaction. Service providers have installed security of information system, service users could feel comfortable and assurance in the technology usage. (Lee and Lin; 2005: 161-176; Mcknight et al., 2002: 334-359; Al-kasasben et al., 2011; Rehman et al., 2012: 258-282). Therefore, service providers need to build confidence in information protection system of users (Al-kasasben et al., 2011). Rotchanakitumnuai (2008: 724-737), cited that information privacy is an important element on e-tax filing usage because is is related to personsl and financial information . Trust has been applied to various e-government contexts. Islam et al. (2012: 6447-6455); Goh et al. (2012: 2088-5342); Pinho et al. (2007: 154-172); Ojha et al. (2009: 65-90) suggested that creating trust on e-tax

filing transaction has a relationship with satisfaction. Similarly, Welch (2005: 371-391) and Al-kasasben et al. (2011) cited that trust on the website contributed to satisfaction on e-service users. Jun et al. (2004: 817-840) found that security and credibility of information on the website are significant elements which have relationship with satisfaction of customer's retailing. Consistent with the study of Maditinos and Theodoridis (2010: 312-329), Sahadev and Purani (2008: 605-620) cited that security perception of customers in protecting the transaction and information privacy have an influence on user's satisfaction of e-service. The important reason for consumers who do not buy goods from website vendors are lack of trust (Lee and Turban, 2001: 75-91). In the context of e-banking, customers need confidence in website security because it has associated with financial risk. Service providers of e-banking have to enhance a high level of financial security to create trustworthiness in the service users' opinions (Chong et al., 2010: 267-287). Therefore, the commitment to build trust of service providers among service users, contributed to long-term relationships with service users (Kassim and Abdullah, 2010: 351-371). As mentioned above, the hypothesis has proposed as follows:

H 4: There is a relationship between trust and satisfaction on e-tax filing.

## Research Framework

The constructed research framework (Figure 1) has been modified by several researchers (Wangpipatwong et al., 2009: 19-35; Pinho et al., 2007: 154-172; Lee and Lin, 2005: 161-176; Herington and Weaven, 2009: 1200-1231; Jun et al., 2004: 817-840; Islam et al., 2012: 6447-6455; Goh et al., 2012: 2088-5342 and Wong et al., 2014: 477-502). The major research model has been used to modify this research from Pinho et al. (2007: 154-172), Wangpipatwong 2009: 19-35 and Islam et al. (2012: 6447-6455).



**Figure 1:** The Research Model of “An Examination of Small and Medium Enterprises (SMEs) Satisfaction toward E-Tax Filing Website in Thailand”

## Research Methodology

The research framework was developed based on various previous research, especially the models of Pinho et al. (2007: 154-172), Wangpipatwong et al. (2009: 19-35), Jun et al. (2004: 817-840) and Islam et al. (2012: 2009: 19-35). Descriptive research was applied by using survey method into 415 respondents with a five point scale of 28 items. Stratified random sampling and convenience sampling were used to distribute the questionnaires to respondents, who were owners or accountants of SMEs with experience in e-tax filing usage. Sampling procedure are presented as follows:

**Step 1.** The researcher users stratified random sampling by dividing the proportion of the Small and Medium Enterprises (SMEs) in Bangkok and its vicinity which is 366,074 (<http://www.sme.go.th>, search 25/01/14), by applying Yamane’s theory (1967) to design sample size with confidence level 95%. Then, the sample size is divided, based on comparing with the total population. As a result, the number of respondents was divided according to the type of business as presented in Table 1.

**Table 1:** Sample Size of The Small and Medium Enterprises Registered

| SMEs registered entity: Bangkok and Vicinity | Number of SMEs | Respondents |
|--|----------------|-------------|
| Industry                                     | 55,378         | 61          |
| Wholesales and Retails                       | 152,358        | 166         |
| Service                                      | 158,338        | 173         |
| <b>Total</b>                                 | <b>366,074</b> | <b>400</b>  |

**Step 2.** After applying stratified sampling to select the specific type of business, convenience sampling was used for distributing the questionnaire to respondents. Since SMEs are not zoned in the population, it is hard to focus on the survey by dividing into type of business. Therefore, the researcher used the convenience sampling for distribution of the questionnaires; as it can be dispersed to all Bangkok and its vicinity.

Conbach's Alpha test was used to analyses the reliability and compatibility of each variable that exceeded the recommend level at 0.70. Structural Equation Modeling (SEM) was used to analyse four hypotheses that have significant level at 0.05. The researcher used principle component analysis with Varimax-rotation technique in exploratory element analysis (EFA) to investigate the element structure of all 28 items of questionnaires. KMO (Kaiser-Meyer-Olkin) is a measurement technique used for testing the adequacy of variables and Bartlett's test of sphericity were used to analyses the relationship of each variable that exceeded the recommended level at 0.50 (Kline, 2005). The root mean square error of approximation (RMSEA), goodness-of-fit index (GFI), tucker levis index (TLI), incremental fit index (IFI), comparative fit index (CFI) and normed fit index (NFI) are important criteria for measurement model fit in the study.

## Research Results

**Table 2:** Summary of Hypotheses Testing Results

|     | Hypotheses                 | to           | $\beta$ | p-value | Supported     |
|-----|----------------------------|--------------|---------|---------|---------------|
|     | <b>Information quality</b> |              |         |         |               |
| H1a | Relevance                  | Satisfaction | 0.079   | 0.017   | Supported     |
| H1b | Accuracy                   | Satisfaction | 0.076   | 0.607   | Not supported |
| H1c | Understanding              | Satisfaction | 0.056   | 0.027   | Supported     |
|     | <b>System quality</b>      |              |         |         |               |
| H2a | Function                   | Satisfaction | 0.051   | 0.056   | Not supported |
| H2b | Usefulness                 | Satisfaction | 0.058   | 0.474   | Not supported |
| H2c | Ease of use                | Satisfaction | 0.046   | ***     | Supported     |
|     | <b>Service quality</b>     |              |         |         |               |
| H3a | Tangibility                | Satisfaction | 0.074   | 0.027   | Supported     |
| H3b | Reliability                | Satisfaction | 0.094   | 0.191   | Not supported |
| H3c | Empathy                    | Satisfaction | 0.084   | 0.251   | Not supported |
| H4  | Trust                      | Satisfaction | 0.042   | ***     | Supported     |

Model Goodness- of -fit statistics:

Chi-square = 739.332

GFI = 0.882

TLI = 0.904

Degree of freedom = 281

IFI = 0.930

CFI = 0.929

$\chi^2/df$  = 2.631

RMSEA = 0.063

p-value = 0.000

NFI = 0.891

Table 2 presents the summary of the results of hypotheses testing, the research results have been found that information in terms of relevance has relationship with satisfaction of e-tax filing of service users at the highest level ( $\beta = 0.079$ ), service quality in terms of tangibility was at the second level ( $\beta = 0.074$ ) and information in terms of understanding is at the third level ( $\beta = 0.056$ ), system quality in terms of ease of use is at the fourth level ( $\beta = 0.046$ ), and followed by trust ( $\beta = 0.042$ ). On the other hand, information in terms of accuracy, system quality in terms of function and usefulness, service quality in terms of reliability and empathy were found no significant relationship with taxpayer's satisfaction.

The Chi-Square to Degree of Freedom ratio is 2.631, within the recommended reasonable fit level should be less than 3.00 (Arbuckle and Wothke, 1999; Bollen, 1989). Other measures of fit also indicated the suitable model fit statistics: the goodness-of-fit index (GFI) = 0.882 between 0 to 0.90 (Kline, 2005). The root mean square error of approximation (RMSEA) = 0.063 (< 0.08) within the recommended reasonable fit level should be less than 0.08 (Kline 2005). The tucker lewis index (TLI) = 0.904 (> 0.90) within the recommended reasonable fit level should be greater than 0.90 (Lattin et al., 2003). The incremental fit index (IFI) = 0.930 (> 0.90) with the recommended reasonable fit should be greater than 0.90 (Lattin et al., 2003). The comparative fit index (CFI) = 0.929 (> 0.90) within the recommended reasonable fit should be greater than 0.90 or close to 0.90 (Lattin et al., 2003; Kline, 2005). The normed fit index (NFI) = 0.891(0 to 0.90), (Lattin et al., 2003; Kline, 2005). The model illustrates the model-fit which clarified the results are more than a recommended acceptable level, representing and suitability model.

## Conclusion and Discussion

The aim of this research is to explore the quality of e-tax filing website toward enhancement tax payers' satisfaction. Information quality, system quality, service quality and trust were used to predicate the satisfaction in the context of e-tax filing websites.

The demographic of the study results explain that there are male (52.3%) more than female (47.7%). About 25.3% of the respondents aged more than 41 years old and aged between 26-30 years old. This is followed by 22.7% of those between 31-35 years old, 21.9% of respondents aged between 36-40 years old, followed by 4.8% aged 25 years old or less. The highest percentage of monthly income was 100,000 Baht or less, that accounted for 42.20%. The second level was between 100,001-200,000 Baht, that accounted for 24.30%, the third level was between 200,001-300,000 Baht, that accounted for 18.60%. About 7.50% was between 300,001-400,000 Baht and more than 400,001 Baht. Almost all of respondent was Bachelor's degree, that accounted for 54.70%, followed by lower than Bachelor's degree, that accounted for 29.90% and Master's degree, that accounted for 15.40%. Almost all of business were wholesalers and retailers, that accounted for 42.70%, followed by service business, that accounted for 41.70% and industrial business, that accounted for 15.70%.

The result of satisfaction independent t-test between male and female has indicated that difference of gender had not significant relationship with e-tax filing satisfaction. In addition, the analysis of variance (ANOVA) shown a significant relationship among difference of age, income, and education with e-tax filing satisfaction but kind of businesses were not significant. The aged over 41 were satisfied more than aged 25 years old or less, the others were not different. Income level of 100,001-200,000 were satisfied more than those with income level more than 400,001, the others were not different. Respondents with education level of Bachelor's degree were satisfied more than those with lower than Bachelor's degree, the others were not different.

A better understanding of this phenomenon helps the Revenue Department of Thailand to reach the strategic designs for tax payers. Based on the results, information quality in terms of relevance has found a more important element influence on satisfaction, followed by service quality in terms of tangibility, information quality in terms of understanding, system quality in terms of ease of use and trust were the fifth level. The results thereby insist that information quality, system quality service quality and trust relationship with satisfaction as DeLone and McLean (2003: 3-30), Maditinos and Theodoridis (2010: 312-329) asserted. This outcome thereby suggests that the Revenue Department should assure that these five dimensions have been integrated in the e-tax filing websites. The followings are suggestions based on findings.

**Relevance of information:** E-tax filing should focus on the information designed within the consistency and relevance of each webpage and necessary information to meet the requirements. In addition, website design should focus on the sequencing of e-tax filing contents which should be internally associated.

**Tangibility of service:** Officials in charge should have the enthusiasm to solve the problems for tax payers. In addition the officials should show friendly and individualized attention to tax payers.

**Understanding of information:** E-tax filing website should provide the sequencing of the information which is continuous, readable and understandable such as information typed in clear fonts.

**Ease of use of system:** E-tax filing website should focus on ease of use and access in using the website for registration, overused navigation, including searching.



**Trust on internet:** E-tax filing website should have the data protection system and the officials are able to build trust and confidence among tax payers.

Furthermore, the Revenue Department should focus on the website design with clear and understandable information such as suitable colors and fonts. The website should be designed to link with easiness for tax payers. In addition, officials of the Revenue Department should have the good knowledge to solve the problem and they should have enthusiasm to provide services through e-mail, phone and web-board. It is necessary for the Revenue Department to recognize the trust on e-tax filing websites. The Revenue Department should assure that they have the system to prevent the information. In addition, they should have specified it in the Cyber Law because the transactions on e-tax filing concern with finance and law to build taxpayers' confidence.

Therefore, it is necessary to increase the number of e-tax filing users. The Revenue Department should assure that the significant dimensions corresponding to information quality in relevance and understanding, system quality in ease of use, service quality in tangibility and trust are well established. Finally, creating the good perception in the field of information quality, system quality, service quality and trust is the important element that the Revenue Department should improve and develop to meet taxpayers' requirements. In addition, the Revenue Department should use public relations within multi-channel for accessing to taxpayers about tax service news such as M-service via smart phone. This is because, in the future, almost all of business owners are "Y" generation aged between 26 and 30 years old who often use technology on daily routines.

## Limitations and Research Directions

This research seeks to identify the elements relationship with satisfaction on e-tax filing usage, the research has two limitations. First, the research has been used a quantitative measurement, it may not reflect an in-depth examination on the subject of satisfaction and intention to use; therefore, future research should apply qualitative method by interviewing respondents. Second, the research intends to focus on Bangkok and its vicinity, future research, should extend their scoped to other provinces in other regions that are the major economic zones of Thailand that generate revenues such as Chiang Mai, Udon Thani and Phuket provinces. These provinces are the large trading centers and regional investments, including major tourist destinations.

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## An Examination of Small and Medium Enterprises (SMEs) Satisfaction toward E-Tax Filing in Thailand

The questionnaire is part of the study of using and satisfaction affect e-tax filing of the Small and medium enterprise (SMEs). The object of the this study for understanding the e-tax filing processes usage of taxpayer. The presentation of this result will be shown an overview without the personal data that lend to negative impacts. Thank you for answering the question and suggestion.

**Explication:** This questionnaire investigated the factor affecting satisfaction on e-tax filing of SMEs (e-revenue) is divided into 5 parts

Part 1: Presented service quality on e-tax filing website and service provider

Part 2: Presented trust toward e-tax filing website

Part 3: Presented satisfaction on e-tax filing

Part 4: Presented the demographic

### The level of review

Level 5 means strongly agree

Level 4 means agree

Level 3 mean uncertain

Level 2 means disagree

Level 1 means strongly disagree

**Part 1:** Service quality on e-tax filing and quality of service provider Using a rating scale of 1 to 5, please mark ✓ the number that indicates your level of disagreement / agreement with the following statements:

|   | Questions   | Strongly disagree Strongly agree |   |   |   |   |
|---|---|----------------------------------|---|---|---|---|
|   | Information quality   | 1                                | 2 | 3 | 4 | 5 |
|   | <b>Accuracy</b>   |                                  |   |   |   |   |
| 1 | The information on e-tax filing ensures that there is no mistake.   |                                  |   |   |   |   |
| 2 | Public relation on e-tax filing is accurate when compared with other sources.   |                                  |   |   |   |   |
| 3 | The recommendation on e-tax filing is accurate.   |                                  |   |   |   |   |
|   | <b>Relevance</b>  |                                  |   |   |   |   |
| 4 | The information connection between each of the web pages are consistent.  |                                  |   |   |   |   |
| 5 | Sequencing of content of e-tax filing is internally associated.   |                                  |   |   |   |   |
|   | <b>Understandability</b>  |                                  |   |   |   |   |
| 6 | The format of categories on e-tax filing is easy to understand and to use.  |                                  |   |   |   |   |
| 7 | The fonts and colors on e-tax filing are clear and easy to read.  |                                  |   |   |   |   |
|   | <b>System quality</b>   |                                  |   |   |   |   |
|   | <b>Functionality</b>  | 1                                | 2 | 3 | 4 | 5 |
| 8 | There is preliminary information-verification system and if any error is found, the feedback will immediately be sent for correction. |                                  |   |   |   |   |
| 9 | There is acceptance confirmation on e-tax filing after the process ends.  |                                  |   |   |   |   |



|    | Questions   | Strongly disagree Strongly agree |   |   |   |   |
|----|---|----------------------------------|---|---|---|---|
|    | System Quality  | 1                                | 2 | 3 | 4 | 5 |
|    | <b>Ease of use</b>  |                                  |   |   |   |   |
| 10 | The transaction process on web pages is easy to learn.  |                                  |   |   |   |   |
| 11 | Links to other web pages and websites is easy.  |                                  |   |   |   |   |
|    | <b>Usefulness</b>   |                                  |   |   |   |   |
| 12 | Using e-tax filing service of the Revenue Department has special features such as training.   |                                  |   |   |   |   |
| 13 | Using e-tax filing service of the Revenue Department can be done every day, even on public holidays.  |                                  |   |   |   |   |
| 14 | Using e-tax filing service of the Revenue Department makes the tax-return process faster than filing the tax document in person at the Area Revenue Office. |                                  |   |   |   |   |
|    | <b>Service quality</b>  | 1                                | 2 | 3 | 4 | 5 |
|    | <b>Tangibility</b>  |                                  |   |   |   |   |
| 15 | If you need help, you can request for recommendation from government officials through e-mail, phone or web-board while using e-tax filing.                 |                                  |   |   |   |   |
| 16 | When the help request is sent, the government official will respond with friendliness through e-mail, phone or web-board.                                   |                                  |   |   |   |   |
|    | <b>Reliability</b>  | 1                                | 2 | 3 | 4 | 5 |
| 17 | You feel that the government official improves the service quality all time when you ask for advice through e-mail, phone or web-board.                     |                                  |   |   |   |   |
| 18 | The government official is able to solve problems every time when you ask for advice through e-mail, phone or web-board.                                    |                                  |   |   |   |   |

|    | Question  | Strongly disagree Strongly agree |   |   |   |   |
|----|---|----------------------------------|---|---|---|---|
|    | Service quality   | 1                                | 2 | 3 | 4 | 5 |
|    | <b>Empathy</b>  |                                  |   |   |   |   |
| 19 | The government official responds and gives the recommendation, enthusiastically as per the request through e-mail, phone or web-board.    |                                  |   |   |   |   |
| 20 | The government official while offering help and service shows politeness continuously for the request through e-mail, phone or web-board. |                                  |   |   |   |   |

**Part 2 : Trust**

|    | Question   | Strongly disagree Strongly agree |   |   |   |   |
|----|--|----------------------------------|---|---|---|---|
|    | Trust in internet  | 1                                | 2 | 3 | 4 | 5 |
| 21 | You can trust in the security of the personal information on the e-tax filing system.  |                                  |   |   |   |   |
| 22 | You can trust the system to maintain about yours' tax payment information for five years.  |                                  |   |   |   |   |
| 23 | You can trust in the process of service recipient verification.  |                                  |   |   |   |   |
| 24 | You can trust the honesty of the government officers for keeping the personal information on e-tax filing transaction as a secret. |                                  |   |   |   |   |

**Part 3: Satisfaction on e-tax filing**

|    | Question  | Strongly disagree Strongly agree |   |   |   |   |
|----|---|----------------------------------|---|---|---|---|
|    | Satisfaction on e-tax filing of SMEs  | 1                                | 2 | 3 | 4 | 5 |
| 25 | You consider that you are satisfied with the quality of the information on e-tax filing.          |                                  |   |   |   |   |
| 26 | You consider that you are satisfied with the quality of the system on e-tax filing.               |                                  |   |   |   |   |
| 27 | You consider that you are satisfied with the quality of the service for e-tax filing.             |                                  |   |   |   |   |
| 28 | You consider that you are satisfied with having the website's security provided for e-tax filing. |                                  |   |   |   |   |

**Part 4: Demographic questions**

## 29. Gender

- ☐ 1. Male      ☐ 2. Female

## 30. Age

- ☐ 1. Less than 25 years      ☐ 2. 26-30 years  
☐ 3. 31-33 years      ☐ 4. 36-40 years  
☐ 5. More than 41 years

## 31. Income per month of business

- ☐ 1. Less than 100,000 Baht      ☐ 2. 100,001- 200,000 Baht  
☐ 3. 200,001- 300,000 Baht      ☐ 4. 300,001- 400,000 Baht  
☐ 5. More than 400,001 Baht

## 32. Education level

- ☐ 1. Lower than Bachelor's degree      ☐ 2. Bachelor's degree  
☐ 3. Master's degree or over

## 33. Type of Business

- ☐ 1. Industrial business      ☐ 2. Service business  
☐ 3. Wholesale and retail business

*Thank you very much*