# Examining Customer Satisfaction of the E-Customs Services in Ho Chi Minh City, Vietnam 

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#### Abstract

This study aims to analyze the impact of E-custom services and perceived value on customer satisfaction. We use the partial least squares method to implement structural equation modeling analysis based on 343 questionnaires conducted in Ho Chi Minh City, Vietnam. The findings showed that E-customs services have both positively direct effect and indirect effect on customer satisfaction through customer perceived value. Furthermore, reliability, functionality and citizen support are the determined dimensions of E-customs services. Emotional value has a positive impact on perceived value. The results provide some recommendations for the customs departments to improve the quality of E-customs services, identify key factors and create appropriate customs policies.


Key words: E-custom services, customer satisfaction, perceived value, identify key, Vietnam

## INTRODUCTION

The trend of global integration has been ongoing profound the effects on the Vietnamese economy. This trend was one side of creating a mechanism for the Vietnam economy mounted outside. The Vietnamese government has implemented new comprehensive economic reforms to promote competition, maximize the available resources, boost production business and improve social welfare. On the other side, the integration process, the continuous improvement of service quality is one of the important challenges and opportunities for the economic development. Specifically, the better customs services enable domestic enterprises to foster the international trade. However, how to serve customers in time and convenience is always the most difficult issue that the service delivers concerned most.

Stemming from the above context, all state agencies in Vietnam gradually improved to keep up the economic growth and globalization. Particularly, due to poor communication issues and bureaucratic delays in many customs departments, Ministry of Finance and General Department of Vietnam Customs have reformed many policies to promote the applications of information technology in customs clearance. It is worth noting that the degree $149 / 2005 / \mathrm{Q}-\mathrm{TTG}$ on $6 / 20 / 2005$ of the Prime Minister has played an essential role in implementing the electronic customs (E-customs) to resolve communications and customs procedures about product electronic declaration (E-manifest), electronic
clearance (E-clearance), pay tax via electronic devices (E-payment) and electronic country of origin (E-C/O and E-permit).

On August 8, 2011, the E-customs was introduced in 18 branches of the customs departments and received positive feedbacks from 49,239 enterprises. However, in the initial process of E-customs service implementation, the enterprises have faced with some issues when using E-custom service such as the declaration software had not operated smoothly and dealt with frequent traffic congestion; even many enterprises had to return at night to transmit electronic declarations. Besides, there were some troubles with customs officers such as harassing E-customs procedures when dealing with non-profit purposes. Moreover, E-custom service was a new type of services, so the enterprises have not had much experience to get use it. The Vietnamese government has attempted to apply E-customs to facilitate the international trade. However, there are some questions about the customer satisfaction with this service, such as how customers evaluate the E-custom service quality and enhance the quality of E-custom service.

In terms of research, E-customs service is still a new topic in Vietnam with few studies although this study has been investigated in other countries for a long time. The previous studies just generally mentioned E-customs services or analyzed import-export declaration procedures without going to details in how E-customs services can affect other factors in business and customers' perspectives. Hence, this study will focus
on the E-custom service quality in terms of both export and import field as well as the customer satisfaction of E-custom service quality. Moreover, we also attempt to give some recommendations for the customs departments to improve the service quality and suggest some advices for the enterprises to use this service effectively.

In this study, we found out two determinants of customer satisfaction toward E-customs: perceived value and E-custom service quality. Besides, reliability, citizen support and functionality also had significant impacts on E-customs service which in turn had a positive influence on perceived value. Finally, emotional value has a positive effect on perceived value but there is no impacts of price and social value on perceived value.

The rest of this study is presented as follows: the next section, literature review, provides previous studies on the relationship between E-customs and customer satisfaction. Based on that we proposed some hypotheses and developed the conceptual research model. The third section consists the methodology of the research, including the questionnaire design and data collection. The fourth section includes data analysis and findings, followed by some discussions. The final one gives the conclusion and provides some recommendations for the customs departments and enterprises to use the service.

## Literature review

E-customs: Electronic customs procedure (E-customs) is a type of declaration customs by an installed software on computers and then through the internet, the declaration data will be transferred from a company to a specific customs department to implement the import-export clearance. As defined in the Circular dated November 25, 2011, No. 222/TT-BTC, E-customs is the procedures of customs declaration, receipt, handling of customs declared information and decisions made through the system of electronic data processing customs. In electronic customs forms, customs declarants input data and transfer it over the network to the customs authorities and received feedbacks from the customs officials. The E-customs procedure is the new application that belongs to the government service with the purpose of promoting the custom system to be advance and enhance the management information system of the government.

Service quality: The meaning of the quality can be referred to many attributes such as the experiences of the service delivery, the image, the price of the service, the "moments of truth" or the evidence of the service, etc. Various opinions formed the customer's overall perception of quality, satisfaction and value
(Zeithaml et al., 1996). Fundamentally, the service quality is defined based on the customer perspective but not the supplier of the service; so it implies the customer perceived quality. Lewis and Booms (1983) also stated that the service quality could be measured by how the delivered service well matches with the customer's expectations. Additionally, service quality is a kind of attitudes that have some correlations with satisfaction that result from a comparison of expectations with the perception of performance (Parasuraman et al., 1985).

Customer satisfaction: Customer satisfaction is "as an attitude-like judgment following a purchase acts or a series of consumer products interactions" (Lovelock, 1996). Meanwhile, Oliver (1999) stated that satisfaction is a function of disconfirmation which in turn is a function of both expectations and performance. It implies that a consumer feel pleasurable and fulfill when using a product or service freature. Another point from Kotler and Amstrong (2003) is that satisfaction reflects a person's feelings of pleasure or disappointment after they compared his or her products' performance (outcome) with others in relation to his or her expectation of the product or service they received.

Customer satisfaction is an important key for all companies and it is a goal for all business activities in a competitive market (Anderson et al., 1994). Reichheld (1996) states that customer satisfaction is also the key to open the successful business when they have to compete in the market. Hence, customer satisfaction is the factor that many researchers and companies concern on it to gain the customer loyalty.

## Research variables and hypotheses

E-service quality and its antecedents: The E-service has been used properly for online task services such as online shopping and electronic procedure (Zeithaml et al., 2002). Measuring the quality of E-customs services is a necessary step for the government and customs departments. According to Zeithaml et al. (2000), E-service quality is comprehended from both pre and post-website service perspectives. In addition, E-service quality is a critical factor that the companies need to satisfy customers and retain and keep customer loyalty. In a study of Wong (2011), service quality was confirmed not only related to the output delivered to customers, but also the emotion of the customer when they receive the output. This author also stated that customers' negative emotion will strongly affect their satisfaction towards service quality. Moreover, Fassnacht and Kose (2007) found a strong relationship between E-service quality and customer satisfaction. In this study, E-customs is one kind of E-service. The first hypothesis can be proposed as follows:

- $\mathrm{H}_{1}$. The E-customs service positively affects the customer satisfaction

Furthermore, this study also tests the relationship between some antecedents with the E-custom service and determines their impacts on the E-customs services. Those factors are reliability, trust, citizen support, efficiency and functionality which were proven to have an impact on E-customs quality (Papadomichelaki and Mentzas, 2012). Firstly, the authors stated that reliability concerns about the ability to perform the promised service accurately, the accessibility of the site, in time service delivery and browser system compatibility. When the users access the E-customs procedure, they may also concern about the speed of downloading, receiving and transferring the information via websites, this implies that this factor may have an impact on E-customs services. Hence, we propose a hypothesis as follows:

- $\mathrm{H}_{2}$ : Reliability positively affects E-customs services

Secondly, trust indicates the extent to which users believe in the safety of the websites through the instruction and protection of personal information (Gefen et al., 2003; Zhao and Zhao, 2010). Besides, trust also mentions about the protection of personal data, correct transaction, access control and information security. Trust plays a role as a critical aspect of E-service quality is and its importance has been stressed in previous studies (Gefen et al., 2003). Based on previous literature, we propose another hypothesis:

## - $\mathrm{H}_{3}$ : Trust positively affects E-customs services

Citizen support is the ability to get help when the user needs. It also indicates the relationship between the users and the employees who takes responsible for website management, showing the interaction between both of them. Specifically, in case of interaction between staffs of customs departments and their customers-employees, citizen support mentions the knowledge, experiences and courtesy of those staffs, their abilities to reply to customer inquiries and build trust to customers and solve problems (Parasuraman et al., 1985, 2002). Thus, citizen support may contribute to customer satisfaction towards a product or service, (i.e., Ecustoms), as stated in the following hypothesis:

- $\mathrm{H}_{4}$ : Citizen support positively affects E-customs services

The efficiency of a service represents the ease of use in searching information from the websites. Quan (2010)
noticed that efficiency showed how to seek more valuable information on the websites. Hence, we can conduct a hypothesized relationship as follows:

- $\mathrm{H}_{5}$ : Efficiency positively affects E-customs services

Finally, functionality is related to the quality of the service that the customer received (Papadomichelaki and Mentzas, 2012). In the context of E-government, those authors argued functionality played an important role in helping users to deal with the public administrations and send their information to the governmental agencies. Obviously, E-customs is a service provided by the government; thus, functionality may also have some contributions to the E-customs services. Based on the literature above, the following hypothesis is constructed:

- $\mathrm{H}_{6}$ : Functional value positively affects the E-custom services

Perceived value and its antecedents: The concept of perceived value can be referred as what consumers generally assess the utility of a product based on their perceptions of what is received and what is given (Zeithaml et al., 1996). Besides, the definition of the perceived value can also be defined from the perspective of money, psychology, quality and benefit (Papadomichelaki and Mentzas, 2012).

The antecedents of perceived value were developed over time by many researchers. That kind of factors included functionality, price, social aspect and emotion (Sweeney and Soutar, 2001). In addition, Petrick (2002) also found out that perceived value of service was impacted by behavioral price, monetary price, emotional response, quality and reputation.

Functionality is the perceived utility of customers towards the capacity for functional, utilitarian, or physical performance of a product or service (Sheth et al., 1991). Functionality was traditionally considered as the primary driver of consumer choice; thus, in addition to its impact on the quality of the product, it may play a role in the product value perceived by consumers.

- $\mathrm{H}_{7}$ : Functionality positively affects the perceived value.

Sheth et al. (1991) also defined emotional value as the perceived utility of customers towards a product or service through their feelings or affective states. Accordingly, products and services were considered to be associated with emotional responses from customers,
such as the excitement to see a high-quality mobile phones, happiness aroused while enjoying a good customer service from a bank, etc. Therefore, emotional value may have an effect on perceived value, as stated in the following hypothesis:

- $\mathrm{H}_{8}$ : Emotional value positively affects the perceived value

In addition, social value, presented by either positively or negatively stereotyped demographic, socioeconomic and cultural-ethnic group, may influence on the perception of customers towards goods and services (Gallarza and Saura, 2006; Vigneron and Johnson, 2004). When customers choose a product (e.g., household appliances, mobile phones) and goods or services to share with their friends, (e.g., presents, game devices like Play stations or Xbox), they are usually affected by advices from other people. Hence, we constructed a hypothesis as follows:

- $\mathrm{H}_{9}$ : Social value positively affects the perceived value

Finally, before choosing a product or service, customers also care about its price. Zeithaml (2000) argued that some consumers perceive value when there is an affordable price. Hence, a proposed hypothesis can be stated below:

- $\mathrm{H}_{10}$ : Price positively affects the perceived value

The relationship between perceived value and E-service quality: The strong relationship between service quality and perceived value was confirmed in many studies by Wong (2011), Turel and Serenko (2006). There was also evidence that perceived value also has a positive effect on the customer satisfaction (Yuan et al., 2007; Quan, 2010). From the discussion above, the two following hypotheses in this study can be proposed:

- $\mathrm{H}_{11}$ : E-customs positively affects perceived value.
- $\mathrm{H}_{12}$ : Perceived value positively affects the customer satisfaction.


## MATERIALS AND METHODS

Research framework: Based on previous literature, a research model for this study was constructed as Fig. 1.

Methodology: All the item measurements used in this study were adapted from previous studies of

| Table 1: Respondents' profiles |  |  |  |
| :--- | :--- | :---: | :---: |
| Factors | Items | Frequency | Percentage |
| Type of enterprise | Domestic | 252 | 73.5 |
|  | FDI | 91 | 26.5 |
| Scale of enterprise | Large (>10 billion VND) | 191 | 55.7 |
|  | Medium and small | 152 | 44.3 |
|  | (<10 billion VND) |  |  |
| Position | Company staff | 307 | 89.5 |
|  | Customs Agency staff | 36 | 10.5 |
| Place to contact | The Intemet | 111 | 32.4 |
|  | Customs Department | 226 | 65.9 |
|  | Consultant company | 6 | 1.7 |
| Way to contact | Directly at customs department | 244 | 71.1 |
|  | Phone | 64 | 18.7 |
|  | Website or email | 15 | 4.4 |
|  | Dispatch | 14 | 4.1 |
|  | At training classes | 6 | 1.7 |
| Total |  | 343 | 100.0 |

Papadomichelak and Mentzas (2012), Quan (2010) and Sweeney and Soutar (2001). First, we translated all questions from English to Vietnamese. Secondly, we conducted a pilot test with 40 participants during three weeks. The results collected from the pilot test enabled us to verify the questionnaire design for better layout and easier to understand and answer. Moreover, after adjusting, the questionnaires were considered to be unambiguous, separated and logically arranged.

The questionnaire included two parts; demographics of the respondents such as type and scale of enterprises, the position of correspondents, etc. and questions presenting aspects of the E-customs service, perceived value and the customer satisfaction following 5-point Likert Scale from 1 Strongly disagree to 5 Strongly agree.

We conducted our survey with officials and staffs who were working at companies and involving in electronic customs declaration. It took more than 6 months to complete this survey. We started delivery the questionnaire in October 2013 and finished in March 2014. The correspondents had knowledge and experience working with customs departments. The questionnaires were delivered in two ways: paper-based questionnaires at some ports in Ho Chi Minh City such as Newport, Cat Lai Port, IDC Port, the Customs Department on Ham Nghi Street and online survey via emails. We distributed 500 questionnaires including 350 direct surveys and 150 online surveys. As a result, a total of 343 valid responses were collected and used for data analysis. The demographic profiles of respondents were summarized in Table 1.

Table 1 shows that nearly $75 \%$ of respondents in this study are the representatives of domestic firms and most of them are office employees ( $89.5 \%$ ). Regarding of the enterprises' scales, there is an approximate balance between large firms $(55.7 \%)$ and small and medium ones (44.3\%). Over half of the enterprises chose to contact with the customs department directly while some of them used the Internet or phone.


Fig. 1: Proposed research model

## RESULTS AND DISCUSSION

We used Partial Least Squares modeling (PLS) with supporting by SmartPLS 2.0 M 3 to examine the above research framework. PLS is considered to become more popular in recent research thanks to its advantages such as minimal requirements in sample sizes and sample distribution and the phenomenon of the complexity of measurement scales and research models (Hair et al., 2014). This study follows the step-by-step analysis recommended by Hair et al. (2012) and Peng and Lai (2012) that the structural equation modeling is tested after the measurement's validity was confirmed.

First, we conduct convergent validity and reliability analysis. The Average Variance Extracted (AVE) and Composite Reliability (CR) should be used to test the convergent validity and reliability of the data with the requirements that the AVE must be larger than 0.5 and CR larger than 0.7 (Hair et al., 2012). Furthermore, it was requested that the outer loadings of each item should be $>0.7$. After the removal of some unqualified measurement items, the values of AVE and CR as well as the outer loading of each item, satisfied the above criteria as presented in Table 2.

Secondly, we applied the criterion developed by Fornell and Larcker (1981) to examine discriminant validity. Thus, we built a matrix of correlations among all constructs and replaced the diagonal with the square root of the AVE of each corresponding constructs. According to Table 3, all values in the diagonal are larger than the other values in the matrix, indicating a strong empirical evidence for the reliability and validity of our measurement items and variables.

Furthermore, Henseler et al. (2009) suggested that in order to more ensure that all the constructs meet the

Table 2: Assessment of convergent validity and reliability

|  | Range of <br> Cactor loading | AVE | Composite <br> reliability |  |
| :--- | :---: | :---: | :---: | :---: |
| Cronbach's <br> alpha |  |  |  |  |
| Reliability (REL) | $0.708-0.765$ | 0.537 | 0.822 | 0.712 |
| Trust (TRU) | $0.768-0.793$ | 0.610 | 0.862 | 0.787 |
| Citizen Support (SUP) | $0.742-0.829$ | 0.584 | 0.893 | 0.858 |
| Efficiency (EFF) | $0.822-0.854$ | 0.703 | 0.825 | 0.777 |
| Emotion (EMT) | $0.774-0.833$ | 0.626 | 0.832 | 0.707 |
| Social Value (SOC) | $0.716-0.770$ | 0.536 | 0.821 | 0.712 |
| Price (PRI) | $0.763-0.864$ | 0.662 | 0.887 | 0.835 |
| Functionality (FUNC) | $0.890-0.898$ | 0.806 | 0.892 | 0.758 |
| E-customs (ECUS) | $0.728-0.800$ | 0.527 | 0.815 | 0.705 |
| Perceived Value (PER) | $0.710-0.747$ | 0.540 | 0.824 | 0.716 |
| Customer Satisfaction | $0.702-0.769$ | 0.531 | 0.819 | 0.726 |
| (SAT) |  |  |  |  |

requirement of discriminant validity, the cross loadings of items should also be examined. This method requires that an item should load on its corresponding construct more strongly than its cross loading on other constructs with at least 0.2 in the difference between the item's loading and its highest cross loading value (Hair et al., 2012). Therefore, the findings confirmed a strong evidence for the reliability and validity of the constructs.

Structural equation modeling: PLS algorithm was run to obtain path coefficients and R-squared values to assess the predictive performance of our research model. Furthermore, we used the bootstrapping method to get t -statistic and significance levels to test the hypothesized relationships.

Firstly, the latent variable, customer satisfaction, has an $\mathrm{R}^{2}$ value of 0.295 , meaning that the model accounted for $29.5 \%$ of the variance in customer satisfaction in using E-customs services. Besides, this research model also explained a moderate level of variance in E-customs $\left(\mathrm{R}^{2}=0.345\right)$ and perceived value $\left(\mathrm{R}^{2}=0.275\right)$. In general, those empirical values confirmed the explanatory power of the research model.

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Table 3: Assessment of discriminant validity

|  | SUP | SAT | ECUS | EFF | EMT | FUNC | PER | PRI | REL | SOC | TRU |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SUP | 0.764 |  |  |  |  |  |  |  |  |  |  |
| SAT | 0.488 | 0.729 |  |  |  |  |  |  |  |  |  |
| ECUS | 0.440 | 0.423 | 0.726 |  |  |  |  |  |  |  |  |
| EFF | 0.407 | 0.381 | 0.321 | 0.838 |  |  |  |  |  |  |  |
| EMT | 0.374 | 0.450 | 0.345 | 0.246 | 0.791 |  |  |  |  |  |  |
| FUNC | 0.367 | 0.536 | 0.379 | 0.361 | 0.426 | 0.898 |  |  |  |  |  |
| PER | 0.383 | 0.466 | 0.346 | 0.310 | 0.423 | 0.360 | 0.735 |  |  |  |  |
| PRI | 0.347 | 0.331 | 0.209 | 0.225 | 0.197 | 0.306 | 0.258 | 0.814 |  |  |  |
| REL | 0.432 | 0.450 | 0.503 | 0.319 | 0.365 | 0.387 | 0.394 | 0.246 | 0.733 |  |  |
| SOC | 0.429 | 0.443 | 0.306 | 0.355 | 0.464 | 0.448 | 0.384 | 0.319 | 0.272 | 0.732 |  |
| TRU | 0.452 | 0.481 | 0.374 | 0.471 | 0.342 | 0.429 | 0.391 | 0.221 | 0.370 | 0.419 | 0.781 |

The square root of AVE is shown as bold at diagonal


Fig. 2: Final model with hypothesis testing results

Secondly, as illustrated in Fig. 2, most of the relationships were strongly supported. Accordingly, customer satisfaction was strongly influenced by E-customs ( 0.695 ) which in turn, was significantly impacted by reliability ( 0.448 ) and citizen support ( 0.254 ). Meanwhile, perceived value had an influence on its latent variable with a path of 0.216 , which was mainly contributed by emotion (0.263). Moreover, it was noticed that functionality just significantly affected E-customs with 0.341 in path coefficient.

The positive relationships among E-customs, perceived value and customer satisfaction in the context of Vietnam are consistent with the findings from previous studies, such as the evaluation of E-satisfaction on internet banking in China by Quan (2010). Among them, E-customs had the strongest impact on customer satisfaction, indicating the importance of this factor in reforming public services.

This study also found out some positive relationships such as the reliability of E-customs services, followed by citizen support and functionality. Thus, it implies that firms strongly paid attention to the reliability of E-customs such as on-time delivery, the accuracy of service promises to enhance the quality of service.

Besides, citizen support played a crucial role in evaluating E-customs service quality because firms usually need supports from the officials in the Customs Departments, including guidelines, updated information from Tax Laws, etc. Functionality had a certain impact on E-customs services for a reason that firms also demand an E-customs website for an easy-to use, unambiguous guidelines and logical arrangement. In contrast, trust was rejected in the statement of affecting the E-custom services. In fact, the privacy and security of companies have not been considered in Vietnam. Specifically, the customs departments have no responsibility to protect the declaration information for the firms.

Among the antecedents of perceived value, only emotion has a significant influence on this latent factor. It showed us that firms wanted to feel comfortable and interested when using E-customs, regardless of what price firms need to pay. According to some previous studies about the perceived value, emotional value, price and functionality had a positive impact on the perceive value (Sanchez-Fernandez and Iniesta-Bonillo, 2007). However, this study showed no relationship among them. In Vietnam, the software to make the customs declaration was supplied by a few companies, in which the biggest
and most popular one is Thai Son Technology Company. Hence, the price was set and fixed, leading to the consequence that there was no alternative choice for the enterprises. Therefore, price seemed not to be a factor affecting perceived value in the context of Vietnam. Besides, benefits of E-customs to firms' suppliers and the society were unclear since the main advantage of E-customs was to help enterprises save their time and costs. Thus, social value was not the antecedent of perceived value of E-customs services in the perception of enterprises in Vietnam.

## CONCLUSION

Based on prior literature about the E-service quality, customer satisfaction and perceived value of service, this study developed a new model in the context of Vietnam. The result of data analysis and the hypothesis testing revealed that perceived value and E-customs services have positive effects on customer satisfaction and these two factors had a positive relationship with each other. Based on that, we provided some basic information about the E-customs services in Vietnam and recommendations for making better E-customs system.

The satisfaction of customers on E-customs can be measured by E-customs quality and the perceived value that they received. Thus, in order to make customers more satisfied, the customs department should enhance the quality of E-service in terms of reliability of E-customs websites and the willingness of customs officials to support firms when they come to customs departments. The customs officials need to have more experiences, be more friendly and enthusiastic to help enterprises in doing customs declaration forms by electronic procedures. The E-customs software needs to be easy to use and without bugs and viruses. Moreover, the speed to deliver the information through electronic software should be improved to ensure the real time transactions. If the quality of service is improved and firms were welcomed at customs departments with appropriate behaviors from customs officials, those firms will feel good and comfortable when using service and push their satisfaction level to be higher. In addition, the customs department should concern about emotional value and functionality. Thus, it was suggested that customs departments need to build a good online services to stimulate the international trade. A combination of E-customs websites with well design, well optimized for search and nice appearance could make users feel comfortable to interact with the E-customs system.

There were some limitations in this study. The major limitation and difficulty were about the collection data.

Many respondents denied joining the survey because they were too busy to do paper works at the customs department, making it take more time to spread the questionnaire and collect it back. Secondly, for further investigation of E-customs in the context of Vietnam, there should be more other factors such as government supports or managerial ties to have a wider picture of E-customs procedures and provide better recommendations to improve E-customs services.

## APPENDIX

Item measurements. It worth to noting that the authors have modified all questionnaires to meet Vietnamese context.

Reliability: (Papadomichelak and Mentzas, 2012)

- REL1: Forms in this E-customs site are downloaded in short time
- REL2: This E-customs site is available and accessible whenever you need it
- REL3: This E-customs site performs the service successfully upon first request
- REL4: This E-customs site provides services in time

Trust: (Papadomichelak and Mentzas, 2012)

- TRU1: Acquisition of username and password in this E- customs site is secure
- TRU2: Only necessary personal data are provided for authentication on this E-customs site
- TRU3: Data provided by users in this E-customs site are archived securely
- TRU4. Data provided in this E-customs site are used only for the reason submitted

Citizen support:(Papadomichelak and Mentzas, 2012)

- SUP1: Employees showed a sincere interest in solving users' problem
- SUP2: Employees give prompt replies to users' inquiries
- SUP3: Employees have the knowledge to answer users' questions
- SUP4: Employees have the ability to convey trust and confidence
- SUP5: Employ ees do not bother users when solving their problems
- SUP6: Employees always give answers quickly and accurately.

Efficiency: (Papadomichelak and Mentzas, 2012)

- EF1: This E-customs site's structure is clear and easy to follow
- EF2: This customs site is well customized to individual users' needs

Functionality: (Sweeney and Soutar, 2001)

- FUNC1: The quality of E-customs will last long and be well developed.
- FUNC2: E-customs is a program that has a standard of good service.

Emotional value: (Sweeney and Soutar, 2001)

- EMT1: E-customs is one that I would enjoy
- EMT2: E-customs created a good image for Vietnamese customs
- EMT3: E-customs is one that I would feel relaxed about using
- EMT4: Compared to traditional customs, E-customs do not make me under pressure when making declaration

Social value: (Sweeney and Soutar, 2001)

- SOC1: I think E-customs can reduce negative phenomenon
- SOC2: E-customs would make a good impression on other people
- SOC3: Users of E-customs are treated equally
- SOC4: E-customs would give Vietnam the approval from other countries

Price: (Sweeney and Soutar, 2001)

- PR1: E-customs is reasonably priced
- PR2: E-customs offers value for money
- PR3: E-customs would be economical
- PR4: E-customs is a good service for the price

E-customs: (Quan, 2010)

- ECUS1: Has good display
- ECUS2: has consistent quality
- ECUS3: has an acceptable standard of quality.
- ECUS4: would perform consistently

Perceived value: (Quan, 2010)

- PER1: I think E-customs is valuable for enterprises
- PER2: I think enterprises have received the service quality as expected
- PER3: E-customs helps enterprises actively make declaration and save time
- PER4: I got skills and knowledge when using E-customs.

Customer satisfaction: (Quan, 2010)

- SAT1: The Customs Department has done well in improving customs service
- SAT2: The Customs Department serves customers well
- SAT3: In general, E-customs has contributed well to governmental management
- SAT4: E-customs will developed faster than the development of the world


## REFERENCES

Anderson, E.W., C. Fornell and D.R. Lehmann, 1994. Customer satisfaction market share and profitability: Findings from Sweden. J. Marketing, 58: 53-66.
Fassnacht, M. and I. Kose, 2007. Consequences of Web-based service quality: Uncovering a multi-faceted chain of effects. J. Interact. Marketing, 21: 35-54.
Fornell, C. and D.F. Larcker, 1981. Evaluating structural equation models with unobservable variables and measurement error. J. Market. Res., 18: 39-50.
Gallarza, M.G. and I.G. Saura, 2006. Value dimensions perceived value satisfaction and loyalty: An investigation of university students travel behaviour. Tourism Manage., 27: 437-452.
Gefen, D., E. Karahanna and D.W. Straub, 2003. Inexperience and experience with online stores: The importance of tam and trust. IEEE Trans. Eng. Manage., 50: 307-321.
Hair, J.F., M. Sarstedt, C.M. Ringle and J.A. Mena, 2012. An assessment of the use of partial least squares structural equation modeling in marketing research. J. Acad. Market. Sci., 40: 414-433.

Hair, J.F.Jr, M. Sarstedt, L. Hopkins and V.G. Kuppelwieser, 2014. Partial Least Squares Structural Equation Modeling (PLS-SEM) An emerging tool in business research. Eur. Bus. Rev., 26: 106-121.
Henseler, J., C.M. Ringle and R.R. Sinkovics, 2009. The use of partial least squares path modeling in international marketing. Adv. Int. Market., 20: 277-319.

Kotler, P. and G. Armstrong, 2003. Fundamentals of Marketing. Pearson Education, New York, USA.,
Lewis, R.C. and B.H. Booms, 1983. The marketing aspects of service quality. Emerging Perspect. Serv. Marketing, 65: 99-107.
Lovelock, C.H., 1996. Services Marketing. 3rd Edn., Prentice-Hall, Englewood Cliffs, NJ., USA.
Oliver, R.L., 1999. Whence consumer loyalty?. J. Marketing, 63: 33-44.
Papadomichelaki, X. and G. Mentzas, 2012. E-GovQual: A multiple-item scale for assessing E-government service quality. Government Inf. Q., 29: 98-109.
Parasuraman, A., V. Zeithaml and L. Berry, 2002. SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. In: Retailing: Critical Concepts. Anne, M.F. and S. Leigh (Eds.). Routledge Company, Abingdon, England, ISBN: 0-415-08722-8, pp: 140-162.
Parasuraman, A., V.A. Zeithaml and L.L. Berry, 1985. A conceptual model of service quality and its implications for future research. J. Market., 49: 41-50.
Peng, D.X. and F. Lai, 2012. Using partial least squares in operations management research: A practical guideline and summary of past research. J. Oper. Manage., 30: 467-480.
Petrick, J.F., 2002. Development of a multi-dimensional scale for measuring the perceived value of a service. J. Leisure Res., 34: 119-134.

Quan, S., 2010. Assessing the effects of E-service quality and E-satisfaction on internet banking loyalty in China. Proceedings of the International Conference of E-Business and E-Government, May 7-9, 2010, Guang zhou, China, pp: 93-96.
Reichheld, F.F., 1996. Learning from customer defections. http://hbr.org/1996/03/learning-from-customerdefections/ar/1.
Sanchez-Fernandez, R. and M.A. Iniesta-Bonillo, 2007. The concept of perceived value: A systematic review of the research. Market. Theory, 7: 427-451.
Sheth, J.N., B.I. Newman and B.L. Gross, 1991. Why we buy what we buy: A theory of consumption values. J. Bus. Res., 22: 159-170.

Sweeney, J.C. and G.N. Soutar, 2001. Consumer perceived value: The development of a multiple item scale. J. Retail., 77: 203-220.
Turel, O. and A. Serenko, 2006. Satisfaction with mobile services in Canada: An empirical investigation. Telecommun. Policy, 30: 314-331.
Vigneron, F. and L.W. Johnson, 2004. Measuring perceptions of brand luxury. J. Brand Manage., 11: 484-506.
Wong, C.B., 2011. The Influence of customer satisfaction and switching costs on customer retention: Retail internet banking services. Global Econ. Finance J., 4: 1-18.

Yuan, Y.H., Y.L. Jun, Q. Wei and Y. Qiang, 2007. A study on citizen satisfaction evaluation model of chinese municipal government online services. Proceedings of the 2007 International Conference on Management Science and Engineering, August 20-22, 2007, IEEE, New York, USA., ISBN: 978-7-5603-2278-0, pp: 186-191
Zeithaml, V.A., 2000. Service quality profitability and the economic worth of customers: What we know and what we need to learn. J. Acad. Marketing Sci., 28: 67-85.

Zeithaml, V.A., A. Parasurarnan and A. Malhotra, 2002. Service quality delivery through web sites: A critical review of extant knowledge. J. Acad. Market. Sci., 30: 362-375.
Zeithaml, V.A., M.J. Bitner and D.D. Gremler, 1996. Services Marketing. McGraw Hill, New York, USA.,.
Zhao, J.J. and S. Y. Zhao, 2010. Opportunities and threats: A security assessment of state E-government websites. Government Inf. Q., 27: 49-56.

