QUALITY AND EFFECTIVENESS IN ELECTRONIC TAX FILLING: A STUDY OF TAX-PAYER SATISFACTION

Syahrizal Siregar[1], Supriyadi[2], Lukmanul Hakim[3]

[1,2]*Magister of Technology Management Department, Institut Informatika dan Bisnis Darmajaya*
[3]*Magister of Management Department, Institut Informatika dan Bisnis Darmajaya*
Email: syahrizalsiregar23@gmail.com

Abstract : This study aims to analyse the quality and effectiveness of e-filling application by Indonesia tax payer. The theory adopted IS Success DeLone and McLean using three variables to measure the effectiveness of e-filling include user satisfaction, information quality, system quality, and service quality. Data collected through surveys conducted to taxpayers who have used Tax e-filling. PLS SEM and path analysis was applied to test the influences of the quality antecedents to user satisfaction with IS. The finding reveal that path coefficients provided a measure of the importance of each quality antecedent. The result show that Information quality, system quality, and service quality are increasing taxpayer satisfaction. This result also give evidence that the information quality, quality of system and service quality used by the organization positively affects the level of satisfaction of taxpayers. This study gives suggestion for Directorate General of Taxes could be sought by improving and increasing the information quality, system quality, use, and user satisfaction on e-filing system. This research gives empirical value that information quality, system quality and service quality have significant and positive effects on tax payers' satisfaction.

Keyword: Information Quality, System Quality, Service Quality, Tax Payer Satisfaction

1. Introduction

The role of tax revenue as the main source of state revenue (APBN) in supporting the running of government wheels has encouraged the Directorate General Tax as the agency appointed by the government in collecting tax revenue to carry out tax reform in the form of refinement against taxation policy and modernization of tax administration system potential tax revenue available can be optimally levied with uphold the principle of social justice and provide excellent service to taxpayers.

Modernization of tax administration includes policy reform, reform administrative and supervisory reforms. The objectives of tax modernization are (1) achieving a high level of compliance (tax compliance), (2) achievement of the level belief in high tax administration and (3) achievement of level high employee tax productivity so expected tax revenue increased (Chen, 2010; Alaan, 2016). In, Indonesia, Tax administration reform is undertaken by Directorate General Tax as a form improving the quality of tax service to Taxpayers, one of them the development of tax reporting payable by using electronic letter of notification (e-SPT). Tax reporting payable through manual SPT is assessed to still have weaknesses especially for taxpayers who make large transactions must attach documents (hardcopy) in large enough amount to the Office Services Tax, while the process of recording the data takes a long time so SPT reporting becomes delayed and leads to fine sanctions. Besides it can happen error (human error) in the process of reconfigured data recording manual by fiskus. In order to achieve tax revenue target must be supported by tax facilities and tax compliance in paying its obligations.

Wrong the only one is e-SPT which is an application (software) created by Directorate General of Taxes or namely in Indonesia DJP used by Taxpayer for ease of delivery of SPT. Use of e-SPT meant that all work processes and taxation services go with good, smooth, accurate and facilitate Taxpayers in performing obligations taxation so that tax compliance is expected to increase. Quality is a characteristic of a product or service that reflects how well it meets the needs of its consumers; as such, it is associated with product or service satisfaction (Edwin, 2017). Although consumers ultimately decide whether quality exists, organizations aspire to provide the features that their customers require (Yarmanelis, 2022). The judgments that consumers make about product or service quality are based on what they feel they need. Organizations attempt to determine customer requirements and then to treat these results as guidelines for their products and services. Quality has been described as conformance to requirements, while satisfaction has been defined as conformance to expectations. Under ideal circumstances, there would be no difference between consumer judgment of quality and experienced satisfaction, but circumstances are often less than ideal. Users may have different requirements and meeting the requirements of all users is challenging. The situation is even more difficult in a e-filling system customer support environment. e-filling systems has a vast number of users, a non- homogenous group, who are not confined by organizational context and for whom use of the Web is optional. The government that wishes to build successful e-filling systems must attract users to visit and revisit their sites voluntarily. And potential users can be very different. Their needs are difficult to define, much less to meet. However, providing quality, meeting users' expectations, is critical for the success of Web-based customer support systems (Ratini, 2013, Rifai, 2020)

Studying the impacts of user, not just through the systems, has been a major focus in the marketing literature (Negash et al, 2003; Solihin, et al. 2019) User satisfaction includes a technical aspect (i.e. were things done correctly?) and a relationship aspect (i.e. was the customer treated properly? (D'Ambra, et al. 2021). User satisfaction may be used to avoid adversity and build long-term relationships (Hidayat, 2022). The technical component of customer support is addressed by both information and system quality, the relationship aspect by service quality.

Information quality is a function of the value of the output produced by a system as perceived by the user (Yarmanelis, et al. 2022). Characteristics have been viewed as important determinants of information quality perception including: accuracy, precision, currency, output timeliness, reliability, completeness, conciseness, format, and relevance (Bailey & Person, 1983; Juprizon, Chandra, T., & Komardi, D. (2022), understandability (Srinivasan, 1985), report usefulness (Mahmood, J.N. Medewitz, 1983) and sufficiency, freedom from bias, comparability, and quantitative ness. In this study, information quality was viewed as having two aspects: informativeness and entertainment. These two influence the value customers receive in a e-filling interface (Ducoffe, 1996; Garaika et al, 2020). Informativeness includes information accuracy, relevance, timeliness, convenience, and completeness. Entertainment involves whether the interface is entertaining, enjoyable, pleasing, fun, and exciting.

System quality is a measure of the information processing system itself. Here, we use interactivity and access to stand for system quality. The determining criteria in assessment of system quality are the performance characteristics of the systems under study. These include resource utilization (Kriebel, A. Raviv, 1980); reliability, response time, and ease of terminal use (Swanson,1974) and data accuracy, reliability, completeness, system flexibility, and ease of use (Hamilton, Chervany, 1981; Kurnia & Suradi; 2019). When people use an IS, their experience, which is with all the system's features not just the information it provides, affects their attitudes (Kraut, 1989; Jacksen, Chandra, T., & Putra, R. (2021). Users' perceptions of the features of a

Web-based customer support system should affect their perceptions of the support they receive. Quality of system design, which encompasses system features, has been identified as critical for the success of a system design. IS success is notoriously difficult to assess, but there have been many efforts by the IS research community to determine how to do so. Included in these efforts have been instruments created to user information satisfaction, perceived usefulness and ease of use, end user computing satisfaction, and task–technology fit (Goodhue, 1995; Atika, et al. 2022).

Based on a review of the IS literature, Yoon et al. proposed five categories of system success: business profitability, improved decision quality and performance, perceived benefit of systems, level of system usage, and user satisfaction. DeLone and McLean postulated six aspects of IS success: system quality, information quality, system use, individual impact, organizational impact, and user satisfaction. In the customer satisfaction literature, satisfaction is a distinct concept, different from (perhaps, in part, determined by) service quality (Yoon, T. Guimaraes, Q. O'Neal, 1995). We used user satisfaction to indicate the effectiveness of a Web-based customer support system, determined by the information quality, system quality, and service quality of the system. Higher levels of user satisfaction are assumed to correspond to higher levels of e-filling system effectiveness. The survey items used to measure satisfaction employ disconfirmation scales (i.e. scales couched in terms of the evaluation target being ''better than expected'' or ''worse than expected'', rather than in terms of the target being ''poor'' or ''excellent'' or in terms of the respondent being ''very satisfied'' or ''very dissatisfied''). Such scaling is preferred for measurement of customer satisfaction in terms of discriminant and convergent validity, as well as lessened asymmetry of responses (Danaher, V. Haddrell ,1996). Response asymmetry has been a problem with nearly all satisfaction measures; they produce negatively skewed distributions where the majority of responses indicate a satisfied user.

These definitions are consonant with a number of variables related to information quality employed in the IS and marketing literatures, including information accuracy and timeliness, information availability and site friendliness and playfulness (Leung, 2001). In these terms, better information quality has been thought to lead to better customer support. The information quality has a significant direct impact on user satisfaction as indicated by the study of Wahyudi, et al. (2017), which means higher or lower information quality delivered by the system administrator has a high impact on user satisfaction. Makokha and Ochieng (2014) were also in agreement with the idea that user satisfaction can be predicted by information quality.Thus, we have the following Hypothesis 1.

Hypothesis 1. *Information quality is positively effects with taxpayer satisfaction.*

When people use an IS, their experience, which is with all the system's features not just the information it provides, affects their attitudes (Solichin, M., Rasyidi, & Halimatusa'diah, S. (2019). Users' perceptions of the features of a Web-based customer support system should affect their perceptions of the support they receive (Jacksen, et al. (2021). Quality of system design, which encompasses system features, has been identified as critical for the success of a system design. We expected that increases in system quality will increase the effectiveness of a e-filling system. The system supports taxpayers to process fast and complete transactions using e-filing (Lestari, 2019). In addition, indicated system quality is shaped in terms of accessibility, flexibility, reliability, response time, and integration. leading to Hypothesis 2.

Hypothesis 2. *System quality is positively effects with taxpayer satisfaction.*

In e-filling system, service quality acts as an enabler or impediment of the customer support experience. It is therefore hypothesized that better service quality will positively influence the effectiveness of a e filling system. According to Gofur, (2019) service quality according to American Soceity for Quality Control the totality of features and characteristics of a product or service that depends on its ability to satisfy stated or implied needs Goetsch and Davis, (2013) define service quality as dynamic conditions related to products, services, human resources, processes and the environment (Juprizon et al., 2022; Rafizal et al., 2022) that meet or exceed expectations. Thus, we have the following Hypothesis 3.

Hypothesis 3. *Service quality is positively effects with taxpayer satisfaction*

2. Research Methods

Research Design

DeLone and McLean formulated an IS Success model using information and system quality to determine the effectiveness of an IS (DeLone & McLean, 1995). Pitt et al. adapted the DeLone and McLean model to customer service settings by adding a service quality component (Pitt, et al. 1995; Noer, 2016). This paper focuses on the three quality dimensions of the Pitt et al. model, as well as user satisfaction. User satisfaction is used as ameasure of e-filling system effectiveness.

This research is survey research with sample is people who use e-filling in Lampung Province. Data were collected by distributing questionnaires that were conducted online questionnaires and at public places while event in Lampung Province. Survey consisted of items using a 5 point Likert type scale having values ranging from (1) strongly disagree to (5) strongly agree. Sampling technique, is incidental, that is, anyone who is willing to fill out questionnaire that is done online by using gadgets. The number of samples collected was 108 people. The collected data was analyzed using PLS SEM with Smart PLS. The present study utilized partial least squares – structural equation modelling (PLS-SEM) to gauge all hypothesized relationships in the present student. PLS-SEM is a second-generation statistical test and has two (2) primary phases of evaluation. The first phase involves the assessment of the measurement model. The second phase, on the other hand, is the evaluation of the path coefficients (Dimaunahan & Amora, 2016; Lacap, 2019). The research model is presented in Fig. 1.
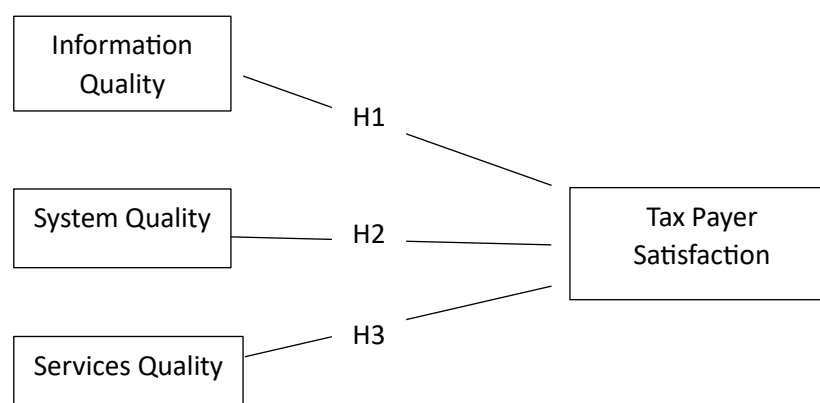

Figure. 1. Research Model

3. Result and Discussion

Outer Model Analysis

The results of outer analysis of this research model can be seen from two parameters namely factor loading and AVE value. The rated factor loading is considered valid if it is greater than alpha 0.5 and the AVE value is greater than 0.5. Convergent validity test is also obtained by looking at the average value of variance extracted (AVE). Composite validity is achieved when the AVE value is greater than 0.5. (Hair et al, 2017). From result of composite reliability test (CR) got number above 0,7 for all variable. According to Sekaran and Bougie, [28], a data is said to be reliable if the minimum alpha coefficient value is above 0.70. Therefore, it can be concluded all the variables are reliable.

Table 1. *Validity and Reliability Results*

Construct	Item Code	Convergent Validity		Composite Reliability
		Loading	AVE	
Information Quality	INFOQUAL1	0.723	0.793	0.8760
	INFOQUAL2	0.812		
	INFOQUAL3	0.823		
	INFOQUAL4	0.744		
	INFOQUAL5	0.752		
	INFOQUAL6	0.865		
System Quality	SYSTQUAL1	0.756	0.841	0.876
	SYSTQUAL2	0.778		
	SYSTQUAL3	0.843		
	SYSTQUAL4	0.825		
	SYSTQUAL5	0.812		
	SYSTQUAL6	0.831		
Service Quality	SERVQUAL1	0.711	0.862	0.864
	SERVQUAL2	0.760		
	SERVQUAL3	0.761		
	SERVQUAL4	0.723		
	SERVQUAL5	0.780		
	SERVQUAL6	0.697		
	SERVQUAL7	0.764		
	SERVQUAL8	0.624		
	SERVQUAL9	0.711		
	SERVQUAL10	0.805		
	SERVQUAL11	0.722		
	SERVQUAL12	0.738		
	SERVQUAL13	0.834		
	SERVQUAL14	0.772		
Tax Payer Satisfaction	SATISFAC 1	0.822	0.855	0.885
	SATISFAC 2	0.768		

Table 2. Hypotesis Testing

Variable	Coefficient	t-Value	Significant	Conclusion
Information Quality (H1)	0.75	6.12	0.000***	*Ha Supported*
System Quality (H2)	0.69	4.58	0.000***	*Ha Supported*
Service Quality (H3)	0.52	3.15	0.000***	*Ha Supported*

Hypotheses Result

Analysis using PLS SEM revealed a significant path from information quality to taxpayer satisfaction, with a path coefficient of 0.75 ($\beta 1 = 0.75$, $p < 0.000$), supporting Hypothesis 1. Similarly, the path coefficient of factors between system quality and tax payers' satisfaction is 0.69 ($\beta 2 = 0.69$, $p < 0.000$), which was also significant, supporting Hypothesis 2. Finally, the path from service quality to taxpayer satisfaction with online tax-filing system was also significant, and had a path coefficient of 0.24 ($\beta 3 = 0.52$, $p < 0.00$), supporting Hypothesis 3. Meanwhile, the R2 value was 0.69. It means that the influence of other variables is 0.31.

Discussion

IS quality involving the complex interplay of many factors; previous studies have measured it in several different ways. We analyzed it in terms of information, system, and service qualities, which are the antecedents of user satisfaction with IS. The hierarchical factor analysis of our data supported the use of the measurement model of IS quality in our work. PLS SEM and path analysis was applied to test the influences of the quality antecedents to user satisfaction with IS. Path coefficients provided a measure of the importance of each quality antecedent. The three hypotheses were all supported.

The largest path coefficient in our model was that between information quality and user satisfaction, as expected. When taxpayers were asked questions about whether they ''generally received sufficient information for filing income tax returns'', they responded neutrally, suggesting that the tax-filing system provides enough help. However, personal information regarding expenditures on tax deductible items (donations and education) is seldom provided simultaneously. Hence, H1 is supported, and is consistent with the studies of Wahyudi, Respati, and Ardianto, 2017; Cho, et al., 2015 and Makokha, et al., (2014) which presented that information quality has a positive influence on user satisfaction. Taxpayers must offer proof to support their tax claims. To maximize deductions, taxpayers must keep their receipts all year long. Imbalances and asymmetrical information concerning taxpayer incomes and deductible expenditures may damage online tax-filing system information qua lity, thus reducing taxpayer satisfaction. Because the path from system quality to user satisfaction was significant, Hypothesis 2 was supported. This result is supported and is consistent with the studies of Cho, et al. (2015) DeLone and McLean, (2003); Wang, et al., (2014); Cheng, et al., (2013); Nikhashemi, et al., (2013). The study measured system quality using the three subdimensions of access, interactivity, and ease of use. Currently, interactive filing is the basic approach to online tax-filing in Indonesia and it involves the taxpayer interacting directly with a Web-based application to file their tax online. Perceptions of Web-based interactivity are influenced by delivery and processing speeds and response speed is a key concern of both providers and users. Interactivity allows users to navigate large quantities of information quickly to find what they need

Therefore, Directorate General Tax should make greater efforts to increase delivery and processing speeds. Service quality is also an important determinant of user satisfaction with the

tax-filing system. We considered only reliability, responsiveness, and empathy. Analytical results from the PLS SEM show that the path from service quality to taxpayer satisfaction with the tax-filing system was significant, supporting Hypothesis 3. This result is supported and is consistent with the studies of Isaac, et al., (2017); Ajoye and Nwagwu, (2014); Wang, et al, (2014); Hudin, et al., (2016) which concluded that system quality has a positive relationship with user satisfaction.

Taxpayers viewed reliability as more important than responsiveness and empathy. Individuals may use these centres to seek assistance in filing returns, pay taxes, view income tax transactions, and update their account information. Meanwhile, responsiveness reflects customer perception that the provider is willing to provide service, and empathy reflects the personal attention afforded to taxpayers. These two sub-dimensions of service quality also impact taxpayer satisfaction.

4. Conclusion

The results showed that information quality, service quality and system quality have effect on taxpayer satisfaction. Overall, the respondents are strongly satisfied with the e-filing system. Furthermore, service quality was found to be significantly and positively related to taxpayer satisfaction. This finding indicates that the level of service quality and the level of satisfaction of taxpayers move in the same direction; meaning, as service quality increases, the level of satisfaction of taxpayers also rises. Based on the result and discussion of this study that the implication to increase the net benefit, Directorate General of Taxes could be sought by improving and increasing the information quality, system quality, use, and user satisfaction on e-filing system, therefore the user perceive of satisfy of system andget the net benefit on e-filing system that can support to increase the job of DGT.

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