# QUALITY OF E-TAX SYSTEM AND ITS EFFECT ON TAX COMPLIANCE (EVIDENCE FROM LARGE TAXPAYERS IN TANZANIA)

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## Abstract

*Globally, countries endeavor toward improving tax compliance behavior with ultimate goal of increasing of tax revenue collection. This study examined the quality of the e-tax system and its effect on tax compliance behavior of large taxpayers in Tanzania. The data were gathered from 313 large taxpayers from three regions in Tanzania, namely Dar es Salaam, Mwanza and Arusha. The study employed Information System Success Model (The IS model) with constructs service quality, system quality, information quality, user satisfaction, behavioral intention and tax compliance behavior (actual behavior). A Partial Least Square Structural Equation Modeling (PLS-SEM) with SmartPLS3 was used to evaluate the latent variables and their indicators. The results showed that behavioral intention to use the e-tax system has the strongest effect on tax compliance behavior. Thus, service and information quality had an incredible effect on creating eagerness to accept and utilize the e-tax system which improves tax compliance behavior. However system quality has not shown significant effect on tax compliance behavior.*

**Keywords:** *E-tax system, PLS-SEM, IS Success Model, Compliance, Large Taxpayers*

## 1. Introduction

The rapid growth and usage of the electronic tax system (e-tax system) amongst large taxpayers have resulted in transformation of the methods of tax collection and the flow of data and information in most countries in the world (Chumsombat, 2015; Sondakh, 2017). Most governments in the world are turning into technology to ease service delivery and provide quality services. (Hammouri and Abu-Shanab, 2017; Kochanova, Hasnain and Larson, 2018) assert that, the benefits of integrating taxpayers with electronic tax system outweigh the disadvantages of using the system. The benefits of using the e-tax system are manifold, which include and not limited to; reasonable expense evaluation, limit the travelling time to tax offices, keep up persevering record keeping, ideal access of records when required, convenient preparing of tax returns and tax dues, and sharing of reliable tax information among taxpayers and the government which lead to improved tax compliance (Mandari, Koloseni and Nguridada, 2017).

Therefore, authorities involved in tax collection are taking advantages of the presence of the e-tax system to superintend suitable management of tax revenue as a result of integration with taxpayers through information sharing for tax purposes (Gilbert et al., 2009; Allen, Murphy and Bates, 2017). This modernization process has introduced different electronic tax systems for the purposes of improving tax compliance, managing tax revenue and bringing the reliability of service delivery through extensive use e-tax system that support the provision of timely information for decision making and provision of convenient services to taxpayers, e-tax systems like e-filing system, e-tax assessment system (EFDs), the revenue gateway system (RGS), Integrated Tax Administration System (ITAX), Tanzania Custom Information System, Taxpayer Identification Number (TIN), The Computerized Motor Vehicle Registration System (CMVRS) (Bird and Zolt, 2008).

Despite the e-tax systems to play a substantial role in minimizing the compliance cost and increasing the value of business (Zaburi, 2014; Casey and Castro, 2015; Mandari, Koloseni and Nguridada, 2017). However, there is no

empirical evidence whether the system has achieved its objectives of improving tax compliance behavior and the link between e-tax system and tax compliance not clearly established (Ben, 2015; Chatama, 2013; Duke, Efiok, Yilmaz & Coolidge, 2013). It has also remained unclear and imprecise on the reluctant, unwillingness, and hesitancy of taxpayers to register and use the e-tax system and the reasons are not well documented (Mandari, Koloseni and Nguridada, 2017; R. and C., 2019). This study, therefore, sought to bridge this gap in knowledge determining the effects of quality of the e-tax system on tax compliance behavior by testing both the segmentation and transmittal effects (direct and indirect effects respectively).

## 2. Literature Review
### 2.1 Theoretical Foundation
The electronic tax system is an advanced strategy whereby a taxpayer is fit of getting all the administrations related to taxes through web offered by a financial and tax authorities such as the registration for a personal identification number, submission of tax returns and other related archives (Wasao, 2014). Tax compliance is characterized as the detailing of all pay and payment of all taxes by satisfying the arrangement of laws, regulations and court decisions (Chatama, 2013). It likewise characterized as the registration, submission of tax returns and other tax archives on time, reporting and payment of all tax commitments on due date without being constrained (Swee et al., 2017). An individual or corporation, on the other hand, is said to be non-compliant if fails to report and pay all tax commitments evaluated on the due date, neglects to consent with the tax laws and overstate the allowable deductions or understate the taxable income (Musimenta et al., 2017).

The study utilized Information System Model (IS model) which determines the link between the six elements of system quality, information quality, service quality, user intention, user satisfaction and the net advantage of utilizing the system (Hsu et al., 2014). System use is the measure of system achievement or success. It is potential and expected utilization of a specific system (Hsu et al., 2014; Chen et al., 2015; Tonkin-Crine et al., 2016). The nature, superiority and relevance of the system use are important results which indicate the time spent in the use of the system. Intent to use the system is considered to be an essential condition under which system use can affect the users (taxpayer) results and performance. When the system is perceived as useful (increase productivity in terms of compliance cost minimization) ; the users will increase the use of the system and vice versa (Ein-dor et al., 1981).

On the other hand user satisfaction is the measure of the effective interface between an information system and its users, it is the measure of the extent to which the users of the system (taxpayers) believe the system meets their requirements (Bharati, Berg and Berg, 2003). Information quality refers to measure of system output that is what real received from the system. This can be the reports obtained from the system, which includes accuracy, precision, reliability, completeness, shortness, relevance, understandability, meaningfulness, suitability, and comparability. System quality is explained in various ways depending on the context of use. Basing on the context of the e-tax system; system quality denotes the attributes of electronic information system with dimensions of usability, accessibility, dependability, flexibility and responsiveness (MD. Aminul Islam, 2012). However, in the context of e-learning, it is the person's perception on the use of the system that is measured in terms of both hardware and software application made in terms of the intended users and the requirements of the user (Freeze, Lane and Wen, no date). This includes the availability of the system, usability of the system, ease of the system, timely response of the system and user expectation of the system (Halawi et al., 2016; Guimaraes et al., 2017; Singh, 2018). Service quality, on the other hand, is the way in which the system can improve performance. Service quality can assist the organisation, company or a firm in fostering competitive advantage. The use and acceptance of any system depends on how the user believes about a certain system (MD. Aminul Islam, 2012).

### 2.2. Empirical review
The study by (Chen et al., 2015) on the factors affecting online tax filing system employed IS Success Model, the study discovered that information quality showed strong and significant influence on behavioral intention to use the system and users' satisfaction. The study further affirmed that higher information quality (IQ) affects the perceived usefulness of the system (Woodall, no date; Bacache Beauvallet, 2018). With regard to service quality (SEVQ); the study indicated that better service quality improves the perception of usefulness and user satisfaction (Floropoulos et al., 2010; Type and Vishanth, 2020). Chumsombat(2015) argues that information quality, system quality in terms of functionality, system quality in terms of usefulness and service quality reported positive significant relationship with

user's satisfaction on e-filing on SMEs. Further Mohammadi (2015)affirmed that system quality, information quality, service quality and technical quality positively affect users' actual use all indirectly and through behavioural intention and users' satisfaction. Similar results were achieved by other studies (Hassanzadeh, Kanaani and Elahi, 2012).

Another study by Gupta et al (2015), on the influence of information systems success on the acceptance of e-filing system conducted in India . The study used PLS-SEM as a tool to analyse the data. The results indicated that SEVQ has positive association with taxpayers' satisfaction with the use of e-filing system. The findings further indicated that PEOU on intention to accept e-filing system was found to be insignificant; there was a strong positive relationship between taxpayers' satisfaction and intention to use the e-filing system by taxpayers. It has been further noted that user satisfaction of the system is an effective and important latent variable used in many studies to assess the success and attainment of the given system (Sys-, 2003). Hou(2012)affirms that there is a strong positive relationship between end-user satisfaction of the system and system usage and between system usage and actual usage (tax compliance for the case of this study).

From the above statements the following hypotheses are proposed:

$H_{1a}$        *Information quality positively influences intention to use e-tax system*

$H_{1b}$        *Information quality positively influences taxpayers' satisfaction to use e-tax system*

$H_{2a}$        *The quality of e-tax system have a positive  direct effect on behavioral intention to use e-tax system*

$H_{2b}$        *The quality of e-tax system have a positive  direct effect taxpayers' satisfaction to use the system*

$H_{3a}$        *Service quality of e-tax system has a direct effect on behavioral intention to use the system*

$H_{3b}$        *Service quality of e-tax system has a direct effect on taxpayers' satisfaction to use the system*

$H_{4a}$        *Users' satisfaction on e-tax system has positive effect on actual usage of the system (tax compliance).*

$H_{4b}$        *Behavioral intention to use e-tax system has positive effect on actual usage of the system (tax compliance).*

## 2.3. Material and method
### 2.3.1. Survey and Measurement Items

The measurement items were developed and adapted from the previous existing literatures and empirical studies. The measurement of the quality of information from E-tax system, service quality, users' satisfaction and quality of e-tax system, were adapted from (Wang, 2006; Srivastava and Teo, 2008; Ozkan and Koseler, 2009; Hsu et al., 2014). Tax compliance measurement was adapted from (Marandu, Mbekomize and Ifezue, 2015; Isbell, 2017; HM Revenue and Customs; and HM Treasury, 2018). Behavioural intention to use e-tax system was developed from; (Abdullah et al., 2014).

A survey based strategy was implemented to collect data from large taxpayers at once and proposed to test and analyse research model. A self-administered questionnaire, in particular, close-ended type structure was ideal in this study by virtue of its ability to improve responses relative to open-ended questions. A seven-point Likert scale was employed to measure the items under study. The scale ranged from very strongly disagree (1) to very strongly agree (7).  This study involved large taxpayers who seemed to impose major tax compliance risks, have tactics of

minimising tax liabilities, a large portion of tax assessments and brings about significant role in income generation (Banda postg 2012,). Large taxpayers had a critical role in revenue collection due to size and the range of taxes they are responsible for, including their role as withholding agents for large numbers of employees. In addition, the justification of using large taxpayers as a unit of analysis is that; large taxpayers are fully-fledged on the use of the e-tax system, and their turnover per annum exceeds the threshold being the condition of using the e-tax system and the law requires them to adopt and use the system (Plan, 2004). Data were analysed using Structural Equation Modeling (PLS-SEM). This technique was proposed due to its robust in providing originality perspective in dealing with manifold relationship at once (Sarstedt, Ringle and Hair, 2017).

Data analysis was performed in two modes which are; the measurement model and the structural model. The empirical measures assisted us in comparing the theory established measurement and structural models with reality, as represented by the sample data. The important reflective measurement model tested includes composite reliability (CR) to evaluate internal consistency reliability (ICR), individual indicator reliability (IIR), and average variance extracted (AVE) to evaluate convergent validity (CV) and discriminant validity (DV). Correspondingly, the structural model assessed the $R^2$ (explained variance), $f^2$ (effect size), $Q^2$ (predictive relevance), and the size and statistical significance of the structural path coefficients.The Fornell-Larcker Criterion, Cross-Loadings, and Heterotrait-Monotrait (HTMT) ratio was ideal to test discriminant validity following its sturdiness suggested in modern studies compared to Fornell Larcker Criterion (FLC) and Cross Loadings (Hair et al., 2012). Cross loadings fail to show a lack of DV when two constructs are distantly correlated. Correspondingly, the FLC performs very poorly, especially when indicator loadings of the constructs under consideration differ only slightly (Voorhees et al., 2016).

Previous studies assessed the quality of the e-tax system on compliance (Chen et al., 2015; Gupta et al., 2015; Mohammadi, 2015; Ofurum et al., 2018). However, there is no empirical evidence if these studies identified the predecessors that have relatively high importance or high total effects for the target construct but also a relatively low performance. The use of Importance Performance Matrix Analysis (IPMA) by this study assisted to add dimensions to the analysis that considers the average values of the latent variable scores and indicators' performance (Sarstedt, Ringle and Hair, 2017). The essence of identifying the constructs and indicators that have relatively higher performance is to discover which constructs need to be improved and seek potential areas of improvement that may receive high attention. IPMA allows the analysis of not only the importance-performance of the constructs but also can be applied to indicators viability. This extension provided an opportunity for the researcher to identify the areas that specifically required improvement.

## 3. Results and Discussion
### 3.1. Results

The findings of this study were in two measurements: first, the measurement model and second, the structural model. The study also examined the importance and performance of each construct on the targeted endogenous latent variable by employing the Importance Performance Matrix Analysis (IPMA). By doing that the study provided a practical implication of knowing which construct or variable requires more improvement in adding value in the organisation. In assessing the outer model the following items were evaluated; internal consistency reliability using modern measuring of composite reliability. Composite reliability is more preferred than Cronbach's alpha as it delivers modern high bound hence overcomes the problem of low reliability. Values between 0.7 to 0.9 CR are acceptable reliability for researches apart from exploratory research with value from 0.6 to 0.7 to be considered. Other items tested from the outer model are convergent validity and the discriminant validity using the average variance extracted and the Heterotrait-Monotrait ratio respectively. The critical value for average variance extracted should be greater than 0.5 to ensure convergent validity and for discriminant validity is suggested to be between 0.85 and 0.9 (Sarstedt, Ringle and Hair, 2017).

### 3.1.1. Measurement Model
### 3.1.1.1. Internal Consistency Reliability

The first step in testing the reliability was to evaluate the internal consistency reliability using composite reliability. Internal Consistency Reliability is the measure of how the data test what intended to be measured conceptually, theoretically and empirically. It was tested using composite reliability, which is more preferred than the use of Cronbach' Alpha. Composite reliability considers individualism when testing the reliability than Cronbach's alpha

which tends to undervalue the internal consistency reliability. Basing on the findings (Table 1 below) all constructs have values greater than 0.7, which show strong internal consistency reliable and are statistically significant (Sarstedt, Ringle and Hair, 2017).

### Table 1. Internal Consistency Reliability

| Constructs | Cronbach's Alpha | rho_A | Composite Reliability | Average Variance Extracted (AVE) |
|---|---|---|---|---|
| BI | 0.810 | 0.831 | 0.868 | 0.572 |
| INFQUAL | 0.737 | 0.747 | 0.826 | 0.487 |
| SERVQUAL | 0.750 | 0.767 | 0.842 | 0.573 |
| SYSQUAL | 0.807 | 0.829 | 0.862 | 0.517 |
| TCB | 0.705 | 0.722 | 0.834 | 0.627 |
| USERSAT | 0.799 | 0.805 | 0.869 | 0.624 |

Whereby: BI= Behavioral Intention, INFQUAL= Information Quality, SERVQUAL = Service Quality, SYSQUAL = System Quality, TCB= Tax Compliance Behavior and USERSAT = User Satisfaction.

### 3.1.1.2. Convergent Validity

"This is the extent to which a measure relates positively with alternative measures of the same construct". This means indicators of a reflective should converge or share high proportion of discrepancies. The higher the outer loadings the higher the associations of the indicators on the specific captured construct. The critical value for statistical significance of the convergent validity should be greater than 0.5 of Average Variance Extracted or value 0.708 or higher than of the outer loadings. The results of this study indicate than all constructs have value of higher than 0.5 except information quality of e-tax system whose value is 0.485 (see Table 1 above). The findings show that the constructs are different from each other and the indicators are statistically significant valid belong to the specific constructs (see also indicators outer loadings Figure 1)

### 3.1.1.3. Discriminant Validity

This is the measure of how one construct differs from other constructs in the model. This means the construct measure the phenomenon which is not measured by another construct in a specific model. The first thing to measure the discriminant validity is by determining indicators of outer loading and the cross-loadings. This study preferred more the use of heterotrait-monotrait ratio (HTMT) because it overcomes the problems resulted from cross loadings and Fornell-Lircker Criterion of failing to detect the lack of discriminant validity when two constructs correlate or constructs differ only marginally. HTMT is the mean of the between correlation to the geometric mean of the within correlation, where the values of 0.85 to 0.90 are an acceptable indication of the presence of discriminant validity. The findings show that SYSQUAL, INFQUAL, SERVQUAL, TCB and USERSAT have values between 0.85 and 0.9 which confirm the presence of discriminant validity (Table 2).

### Table 2. HTMT Construct's

| CONSTRUCTS | BI | QUAL | SERVQUAL | SYSQUAL | TCB | RSAT |
|---|---|---|---|---|---|---|
| BI | | | | | | |
| INFQUAL | 0.950 | | | | | |
| SERVQUAL | 0.989 | 0.956 | | | | |
| SYSQUAL | 0.853 | 0.821 | 0.803 | | | |
| TCB | 0.970 | 0.793 | 1.266 | 0.787 | | |
| USERSAT | 1.123 | 0.884 | 0.950 | 0.864 | 0.965 | |

Whereby: BI= Behavioral Intention, INFQUAL= Information Quality, SERVQUAL = Service Quality, SYSQUAL = System Quality, TCB= Tax Compliance Behavior and USERSAT = User Satisfaction.

### 3.1.2. Structural Model

In the second stage, the study examined five items, namely collinearity, the path coefficients, the coefficient of determination (R2), the effect size (f2) and the predictive relevance of the constructs (Q2). The test for collinearity used the variance inflation factor (VIF) where values greater than 0.2 and lower than 5 considered to be acceptable. P values and T values used to evaluate the significance level of the constructs. The coefficient of determination used to test how the predecessors contributed to outcome variables.

### 3.1.2.1. Assessment for Collinearity

In this stage, we first examined model concepts for multicollinearity (simply collinearity). The essence of testing for the collinearity was because the PLS-SEM in the part of the structural model is built on ordinal least square regressions of each outcome latent variable (BI, USERSAT and TCB) on its equivalent antecedent constructs. It might happens the path coefficients become subjective and biased if its estimation involves high level of collinearity (valiance inflation factor above 3) among its exogenous constructs in the model, testing first for collinearity was a priority for this study. The results of our findings show that all exogenous latent variables have values below 3 which confirm the absence of multicollinearity (see Table 3)

**Table 3. Inner VIF for Constructs**

| CONSTRUCTS | BI | INFQUAL | SERVQUAL | SYSQUAL | TCB | USERSAT |
|---|---|---|---|---|---|---|
| BI | | | | | 6.643 | |
| INFQUAL | 2.477 | | | | | 2.376 |
| SERVQUAL | 2.781 | | | | | 2.288 |
| SYSQUAL | 2.249 | | | | | 1.951 |
| TCB | | | | | | |
| USERSAT | 2.925 | | | | 6.643 | |

### 3.1.2.2. Testing the Significance and the Relevance of the Relationships Among the Constructs

In examining the significances and relevance of the relationships the study compared the critical values (t-values) and (p-values) from the standard normal distribution. Critical values closer to one of path coefficients indicate stronger relationships. The findings of this study indicate that there is strong relationships between user satisfaction of the e-tax system and behavioural intention (0.703) followed by behavioural intention and tax compliance behaviour (0.474) others are service quality and user satisfaction (0.411).

In contrast system quality of e-tax system has a little effect on behavioral intention to use the system. Other constructs (INFQUAL-USERSAT, INFQUAL-BI, and SERVQUAL-BI) have moderate impact (see Figure 1 and Table 5). R2 determines the combined effect of all antecedent latent variables on the outcome variable. It shows the amount of changes of the endogenous variable(s) caused by all predecessor latent variables. Values of 0.25, 0.5 and 0.75 indicate low, medium and higher effect. The results of this study indicate that system quality (SYSQUAL), information quality (INFQUAL), service quality (SERVQUAL) and user satisfaction (USERSAT) of e-tax system explains about 87.8% on behavioral intention followed by 65.8% and 57.8% on explained latent variables of user satisfaction and tax compliance behaviour, respectively. Both exogenous latent variables have substantial effect (greater than 50%) on explained variables (endogenous latent variables) (see
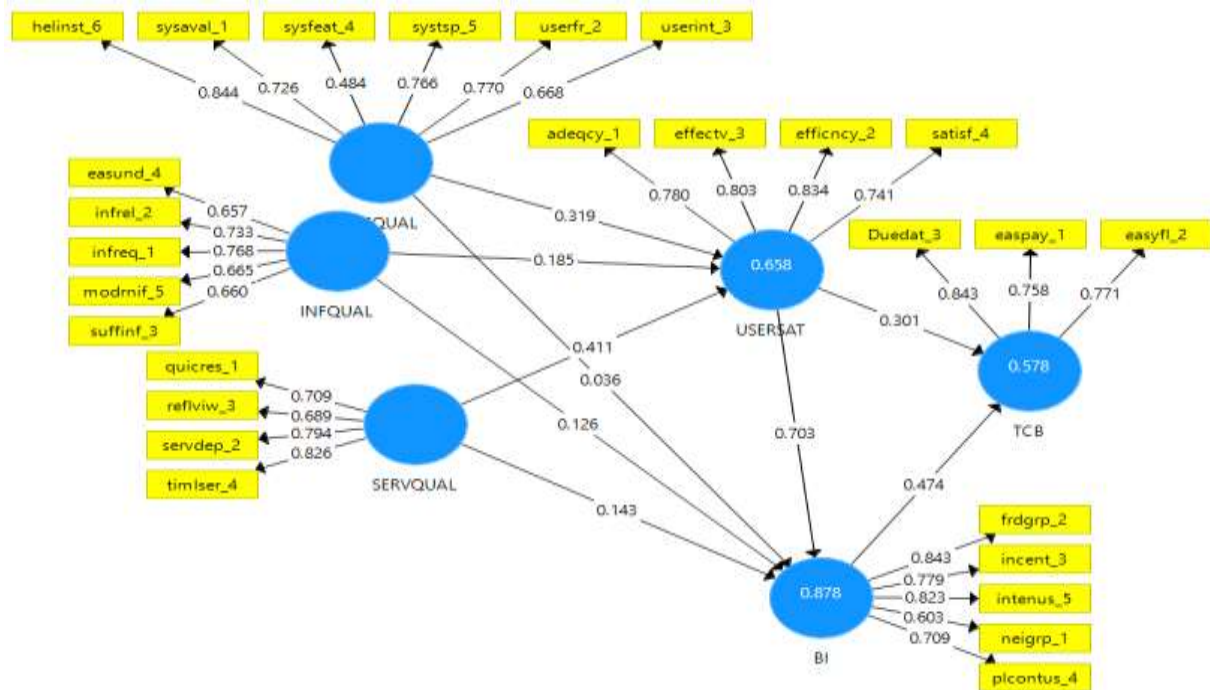
**Figure1. Showing the evaluation of indicators outer loadings, path coefficients and coefficient of determinations (R²)**

**Table 4. Path Coefficients, P-values and T-values**

| CONSTRUCTS | ginal Sample (O) | iple Mean (M) | idard Deviation (STDEV) | atistics (\|O/STDEV\|) | alues |
|---|---|---|---|---|---|
| BI -> TCB | 0.474 | 0.478 | 0.110 | 4.295 | 0.000 |
| INFQUAL -> BI | 0.126 | 0.123 | 0.031 | 4.075 | 0.000 |
| INFQUAL -> USERSAT | 0.185 | 0.184 | 0.059 | 3.150 | 0.002 |
| SERVQUAL -> BI | 0.143 | 0.147 | 0.042 | 3.441 | 0.001 |
| SERVQUAL -> USERSAT | 0.411 | 0.411 | 0.060 | 6.891 | 0.000 |
| SYSQUAL -> BI | 0.036 | 0.037 | 0.031 | 1.153 | 0.250 |
| SYSQUAL -> USERSAT | 0.319 | 0.321 | 0.056 | 5.672 | 0.000 |
| USERSAT -> BI | 0.703 | 0.702 | 0.034 | 20.900 | 0.000 |
| USERSAT -> TCB | 0.301 | 0.300 | 0.111 | 2.708 | 0.007 |

**Table 5. Test for Hypotheses**

| | Hypotheses | P-Value | Status |
|---|---|---|---|
| H₁ₐ | Information quality positively influences intention to use e-tax system | 0.000 | supported |
| H₁ᵦ | Information quality positively influences taxpayers' satisfaction to use e-tax system | 0.000 | supported |

| | | | |
|---|---|---|---|
| H$_{2a}$ | The quality of e-tax system have a positive direct effect on behavioral intention to use e-tax system | 0.250 | supported |
| H$_{2b}$ | The quality of e-tax system have a positive direct effect taxpayers' satisfaction to use the system | 0.001 | supported |
| H$_{3a}$ | Service quality of e-tax system has a direct effect on behavioral intention to use the system | 0.000 | supported |
| H$_{3b}$ | Service quality of e-tax system has a direct effect on taxpayers' satisfaction to use the system | 0.000 | supported |
| H$_{4a}$ | Users' satisfaction on e-tax system has positive effect on actual usage of the system (tax compliance). | 0.000 | supported |
| H$_{4b}$ | Behavioral intention to use e-tax system has positive effect on actual usage of the system (tax compliance). | 0.000 | supported |

### 3.1.2.3. Assessing the Effect Size ($f^2$) and Model Predictive Relevance ($Q^2$) of the Constructs

The assessment of the effect size and model predictive relevance provides more comprehension of the quality of inner model of partial least square. The effect size measures the impact of a particular exogenous construct on the explained latent variable. Reporting the effect size is of paramount significance in understanding the quality and the impact contribution of the given predictor constructs in measuring the endogenous construct when it was excluded (Sarstedt, Ringle and Hair, 2017). Values 0.02, 0.15 and 0.35 indicate small, medium and large effect. The findings show that user satisfaction (USERS-BI) has positive effect on behavioural intention to use the e-tax system (1.379) followed by service quality on user satisfaction (SERVQUAL-USERSAT) (0.215). System quality of the e-tax system has a medium effect on user satisfaction of e- tax system (0.153) followed by behavioural intention on tax compliance behaviour (BI-TCB (0.08). Other constructs have a small impact (INFQUAL-USERSAT 0.042), (SERVQUAL-BI 0.06) and USERSAT-TCB 0.032 (Figure 2). This study also tested model's predictive relevance (Q2) of the specific predictor constructs on the outcome latent variables using cross-validated redundancy approach (CVRA). CVRA is more preferred than cross-validated communality approach because the latter does not include the structural model information to anticipate the excluded data points. Q2 measures the predictive relevance of the model by predicting the data points of indicators in reflective measurement models by evaluating the relevance of antecedent constructs on the specific explained variables. Values 0.02, 0.15 and 0.35 indicate that antecedent constructs have small, medium or large predictive relevance for the chosen outcome variables. The findings show that exogenous constructs have large predictive relevance on behavioural intention to use e-tax system (Q2 = 0.467) followed by user satisfaction (Q2= 0.385). However, all predictor constructs have predictive relevance on the explained variables because their values are greater than zero (see Table 6 below).

*The formula for calculating $Q^2$= 1-<u>Sum of Squared Prediction Error</u>*

*Sum of Squared Original Data*

**Table 6. Predictive Relevance ($Q^2$) of the Specific Exogenous Constructs on Explained Latent Variables**

| CONSTRUCTS | SSO | SSE | =1-SSE/SSO) |
|---|---|---|---|
| BI | 1,565.000 | 834.267 | 0.467 |
| INFQUAL | 1,565.000 | 1,565.000 | |
| SERVQUAL | 1,252.000 | 1,252.000 | |

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| | | | |
|---|---|---|---|
| SYSQUAL | 1,878.000 | 1,878.000 | |
| TCB | 939.000 | 622.079 | 0.338 |
| USERSAT | 1,252.000 | 770.510 | 0.385 |

**Table 7.  Indirect effects of constructs**

| Constructs | Specific Indirect Effects |
|---|---|
| INFQUAL -> USERSAT -> BI | 0.130 |
| SERVQUAL -> USERSAT -> BI | 0.289 |
| SYSQUAL -> USERSAT -> BI | 0.224 |
| INFQUAL -> BI -> TCB | 0.060 |
| SERVQUAL -> BI -> TCB | 0.068 |
| SYSQUAL -> BI -> TCB | 0.017 |
| INFQUAL -> USERSAT -> BI -> TCB | 0.062 |
| SERVQUAL -> USERSAT -> BI -> TCB | 0.137 |
| USERSAT -> BI -> TCB | 0.333 |
| SYSQUAL -> USERSAT -> BI -> TCB | 0.106 |
| INFQUAL -> USERSAT -> TCB | 0.056 |
| SERVQUAL -> USERSAT -> TCB | 0.124 |
| SYSQUAL -> USERSAT -> TCB | 0.096 |

### 3.2. Importance Performance Map Analysis (IPMA)

The IPMA intended to compare structural model total effects on the particular construct in the path model. IPMA measured the important constructs and those with low effects which signified the area that requires more improvement. Centering on the findings obtained from this study on the target construct tax compliance behaviour, user satisfaction has a high effect and is more important on the tax compliance behaviour (0.634) followed by behavioural intention (BI) (0.474). In contrast, Information quality (INFQUAL) is less important that is, has low effect on tax compliance behaviour. That means a unit increase in performance of user satisfaction (USERSAT) from 59.864 to 60.864 on tax compliance behaviour would increase the effect (the importance) of user satisfaction by 0.634 on tax compliance behaviour ( see Figure 3 below). However, other constructs cannot be ignored if the government needs to increase tax compliance behaviour should invest more on the constructs that make taxpayers be satisfied with the services provided by the e-tax system.
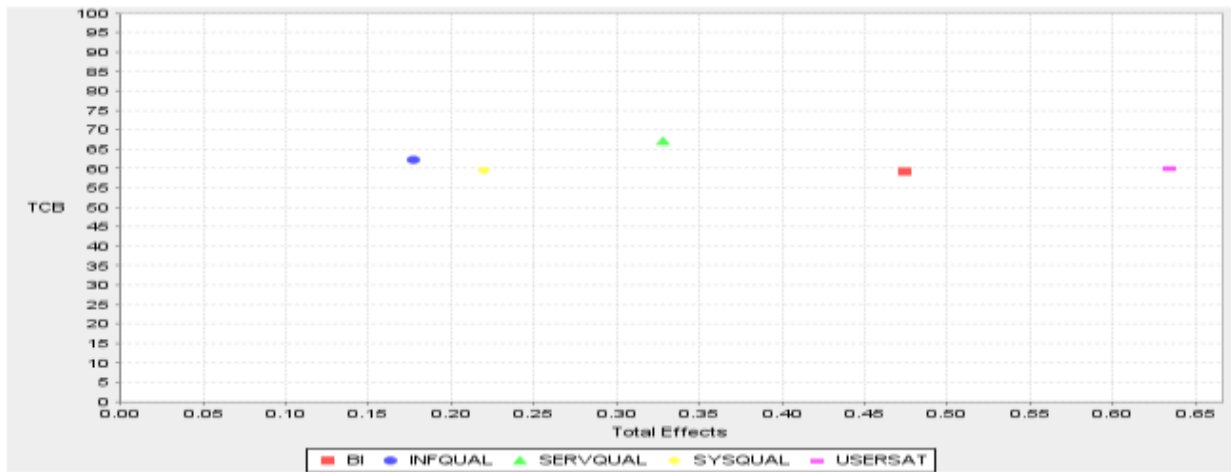
**Figure 3. Importance-Performance Map (TCB)**

## 4. Discussion of the Findings

This paper examined the quality of the e-tax system and its effect on tax compliance behaviour by applying the DeLone and McLean Success Model. The findings of this study show that system quality of e-tax system, information quality and service quality have positive direct effect on user satisfaction and behavioral intention (β = 0.319; P<0.05; β=0.185; P<0.05;β = 0.411; P<0.05; β= 0.126; P<0.05; β=0.143; P< 0.05 respectively. However, the e-tax system quality has not shown significant influence on behavioural intention (β = 0.036; P=0.250). The study further depicted that behavioural intention to use e-tax system has the strongest effect (β =0.474) on tax compliance behaviour. This means the quality of the service (SERVQUAL) provided by the system used by large taxpayers to pay taxes online, file their tax documents and issuing electronic tax receipts has a great impact on creating a positive intention (β =0.143) to adopt and use the e-tax system which has an impact on tax compliance behaviour. Consistent findings were reported which confirm that service quality is a strong antecedent on behavioural intention to use the system (Chen et al., 2015; Zaidi, Henderson and Gupta, 2017). Correspondingly, the quality of the service that the e-tax system have to provide to large taxpayers has a significant effect (β =0.411) on satisfying large taxpayers to use the system. When large taxpayers are satisfied with the quality of the e-tax system (β =0.319), it positively leads to change their behaviour intention to continue using the system which creates a great effect on tax compliance behaviour (β =0.703). This shows that taxpayers' satisfaction with the system has a strong significant on behavioural intention to use e-tax system. The quality of the information from the e-tax system has a direct positive influence on users' satisfaction to use the system (β =0.185) and on behaviour, intention to use the system (β =0.126). The results agree with other empirical studies which advocate that system quality has a positive relationship with users' satisfaction (Casey and Castro, 2015; Mohammadi, 2015; Hammouri and Abu-Shanab, 2017). In contrast system quality found not significant to influence behavioral intention to use e-tax system (β =0.036; P>0, 05). The results of this study conflict with the findings obtained on measuring system quality on behavioural intention in an e-learning context. This depicts that the positive or negative effect on the use e-system depends also in the environment and user group in which the system being applied (Hsu et al., 2014; Mohammadi, 2015). Generally the findings of this study propose that large taxpayers focus more on the quality of information and the service they receive from electronic tax system which impact on their behavior intention to use the system and creates satisfaction which eventually has consistent tax compliance behavior. Our study also examined the indirect effect of e-tax system quality on tax compliance behavior. The study found that there is a strong indirect effect between users' satisfaction to change taxpayers' behavioral intention on tax compliance behaviour (0.333) (shown in Table 7) that is; the effect of taxpayers' to satisfy with e-tax system quality on tax compliance behaviour is mediated by behavioural intention to use the system. More precisely, the nature of the relationship between users' satisfaction on tax compliance behaviour is determined by behavioural intention. Similar results were reported by Mohammadi (2015) and Hassanzadeh, Kanaani and Elahi (2012) which confirmed that there is a significant strong indirect effect between users' satisfaction through behavioural intention tax compliance behaviour.

## 5. Conclusion and Recommendation

The conclusion of this study is the first Liquidity (Current Ratio) significant positive effect on the disclosure of the company's Sustainability Report which followed the Indonesia Sustainability Reporting Award, the higher the liquidity the higher the level of the disclosure sustainability report. Second, the size of the company's significant negative effect on the disclosure of the company's Sustainability Report which followed the Indonesia Sustainability Reporting Award. This shows that the bigger companies are not necessarily the responsibility disclosure level of economic, environmental and social sustainability reports of the company will also be always wider. The third type of industry does not affect Sustainability Report significantly to the disclosure of the companies participating in Indonesia Sustainability Reporting Award. Type of company both high risk and low risk should remain published reports Sustainability Report. But the company's regulations and the specific category does not cause the company must disclose SR. Fourth Corporate Governance Committee no significant effect on the disclosure of the company's Sustainability Report which followed the Indonesia Sustainability Reporting Award. Corporate Governance Committee duties only support a policy of commissioners and directors so that the decision to disclose SR not be the task of the governance committee. Fifth Meeting of the Audit Committee (RADIT) significant positive effect on the disclosure of the company's Sustainability Report which followed the Indonesia Sustainability Reporting Award and the more frequent audit committee meeting frequency and generates a lot of decisions and must be implemented by the company so as to be expressed through the sustainability report.

## 6. Limitations and Future Studies

This study has mainly two limitations; the first limitation is on the unit of analysis. The study involved large taxpayers in examining the effects of e-tax system quality on tax compliance behaviour. Future studies can be directed towards other groups of taxpayers, especially those who use different systems in their daily transactions. The study was limited to three regions in Tanzania that is; Dar es Salaam, Arusha and Mwanza future studies can be carried out in different contexts. There are different theories and models of technology, and system application, the study in hand used information system success model (The IS Success Model) future studies can combine different theories that add more constructs to widen the study.

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