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Revealing the Critical Factors for Tax Compliance Behaviour: An Application of Importance-Performance Map Analysis



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Abstract

Background: Scholars have devoted more time to the concept of tax compliance behaviour in recent years. Insufficient tax revenue collection is one effect of low tax compliance behaviour. The problem of low tax compliance behaviour is universal. If not addressed, emerging and fastest-growing economies with vastly commanding tax authorities will have insufficient tax revenue to finance their budgets.

Objective: This study sought to divulge the critical factors for tax compliance behaviour. Transforming the ways of tax collection into a digital era is central to easy tax compliance. To meet this objective, this study linked the electronic tax system employing the Importance Performance Map Matrix (IPMM), a crucial matrix to determine the importance and performance of the constructs to explain tax compliance behaviour.

Method: This study adopted the survey method. Information on variables under investigation was collected from business centres. A stratified random sampling was employed to obtain the taxpayers who use the e-tax system. The study analyzed data using Structural Equation Modelling (SEM) using SmartPLS3.

Results: Unveiled that behavioural intention is a critical factor in enhancing the behaviour of taxpayers to comply. Additionally, performance expectancy highly influences taxpayers to comply. When taxpayers have high expectations of productivity and return on the e-tax system they use, it drives more intention to voluntary tax compliance.

Conclusion: Tax authorities are argued to introduce or design e-tax systems that improve taxpayers' businesses and increase government tax revenue.

Keywords: Behavioural Intention; Tax Compliance Behaviour; Importance Performance Map Matrix.

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1. **Introduction**

The concept of tax compliance behaviour has received more attention from scholars in recent years due to the growing problem of low tax compliance behaviour and concern about the ability of the government to increase revenue from taxes. Studies that employed Importance Performance Map Analysis to evaluate critical factors for tax compliance behaviour are scarce. IPMA extends structural equation modelling by identifying the importance and the factors that have high effects (perform highly) in explaining the problem of low tax compliance behaviour. Universally, the problem of low tax compliance behaviour is growing, and if not addressed, nations will have insufficient tax revenue to meet their planned budgets, typically in developing countries. (McKerchar & Evans, 2011; IMF, 2022).

It has been argued that even the fastest-growing nations with vastly powerful tax authorities have failed to finance their activities by their own means due to low tax compliance behaviour, even after a series of tax system reforms. (Belay & Viswanadham, 2016). Studies (i.e., Allingham & Sandmo, 1972; Alm, 2012; Batrancea et al., 2012) indicate that tax compliance behaviour is influenced by several factors ranging from economic-based factors to psychological factors. The problem of tax compliance behaviour has been studied extensively using an economic-based approach (possibility of taxpayers being audited, the way taxpayers are treated fairly, the frequent changes in tax laws, the rate of interest calculated on understating tax payable, the rate of penalties, the way government spends the amount of collected taxes, and trust in the government. Though the economic-based factors of tax compliance behaviour proved to play a great role in tax compliance, the problem of low tax compliance behaviour continued to exist.

The factors from an economic perspective have limited scope due to their assumptions and weaknesses of assuming taxpayers are alike and their behaviours will endure the same. To address the problem of low tax compliance behaviour, studies suggest including factors fundamental for taxpayers to comply voluntarily. Therefore, this study intended to address the problem of low tax compliance behaviour by determining the critical factors for tax compliance behaviour employing the Unified Theory of Acceptance and Use of Technology (UTAUT) from the perspective of the e-tax system, evaluated using the Importance Performance Map Analysis (IPMA). Specifically, the study intended to show which variables from the UTAUT (non-economic factors) have a high effect and which factors are more important (critical factors) in explaining tax compliance behaviour linked with the e-tax system. A factor might be important but has a low effect on explaining tax compliance behaviour. Therefore, applying IPMA is imperative for identifying which variables perform highly and are important in enhancing compliance attitudes to taxpayers.

2. Literature Review

2.1. Theoretical Foundation

Tax compliance is the aptitude and disposition of taxpayers to comply with the tax laws, regulations and report the correct deductible income for each year and pay the right amount of taxes on time. Theoretically, tax compliance is a behavioural concern because taxpayers' behaviour is probable and influenced by several factors (Sanga, 2019). Various studies on tax compliance behaviour used economic factors to predict tax compliance behaviour. (Sanga, 2019; Prinz et al., 2013). Although economic factors can predict tax compliance behaviour, they have a weak role in influencing tax compliance behaviour because they are based on an enforcement approach. (Omary, 2022; Ongwamuhana, 2011). The behaviour-based approach is built on psychological and sociological proxies. Under the behavioural approach, taxpayers are not seen as rational and utility maximizers; rather, they are individuals who are motivated to pay taxes based on different determinants including feelings, perceptions, attitudes, norms and other factors that create a positive effect on taxpayers to pay taxes voluntarily (Kirchler et al., 2008; Batrancea et al., 2012; Stark et al., 2017). An example of a behaviour-based approach model is a "Slippery Slope".

UTAU Theory guided this study. This theory was selected due to its relevance in understanding factors inspiring the acceptance and use of technology. UTAUT was originally proposed by Venkatesh in 2003 and expanded by merging various theoretical constructs to explain the acceptance and use of

technology. Variables of UTAUT include performance expectancy, effort expectancy, social influence and facilitating conditions. Performance expectancy relates to the productivity and performance of the technology in use. Effort expectancy relates to the ease of use of the technology. Social influence refers to external factors that influence the performance of a certain technology. Facilitating conditions encompass the availability of resources that enhance the adoption and use of technology. Several theories and models, such as the theory of reasoned action, the motivational model, the social cognitive theory and the technology acceptance model, have been used to study the acceptance and use of technology, including the e-filing acceptance and use and the electronic fiscal devices acceptance. This theory is appropriate for studying technology use and acceptance. As revealed by Mandari et al. (2017), the use of UTAUT has been proposed by many studies due to its advantages of combining various factors from the combined theories and models. Natasya et al. (2019) emphasized that many studies use UTUT to attain an ideal and comprehensive analysis of behavioural intention and individuals' attitudes towards a particular behaviour. Rençber (2020) underlined that UTAUT, particularly the social influence proxy, is used extensively to study the influence of a particular society on the context of tax compliance behaviour. Therefore, UTAUT has revealed a strong basis for the analysis of the inception, adoption, acceptance and use of technology.

2.2. Empirical perspective

2.2.1 UTAUT and the e-tax system application on tax compliance behaviour

Tax compliance behaviour involves reporting the correct amount of tax and paying the required tax on due dates by following all the procedures and tax laws (Machogu, 2015; McBarnet, 2017). Behavioural intention, on the other hand, is an individual's perspective on engaging in a certain behaviour, which is motivated by factors that encourage one to do the actual behaviour (Lee et al., 2024).

Tax compliance can be categorized into different groups, like voluntary tax compliance and enforced tax compliance. Voluntary tax compliance can be achieved by adhering to tax procedures, laws and regulations without being forced. From a behavioural perspective, studies conducted on tax compliance failed to show that tax compliance is a behavioural concern. This is because either a taxpayer pays willingly or is compelled to pay tax by the authority (Swee et al., 2017). That means some factors bring motives toward paying taxes voluntarily or compel taxpayers to evade taxes. From empirical perspectives, tax compliance can further be classified as dedicated or committed compliance, capitulated or surrendered compliance, and creative or inspired compliance. (McBarnet, 2017). Dedicated compliance occurs when taxpayers willingly comply with tax laws and regulations without complaining. Surrendered compliance occurs when taxpayers are unwilling to discharge their tax dues. Inspired compliance, on the other hand, involves minimizing taxes in reporting income and deductible expenditures without breaking the tax law (Alabede, 2011). However, Kirchler et al. (2008) identify two types of tax compliance: enforced versus voluntary. Enforced tax compliance is the degree to which the power of the authority is applied in collecting taxes. In contrast, voluntary tax compliance is achieved when individuals trust the authority in which taxes.

An electronic tax system is a digital platform for taxpayers to access tax services through the internet. Such services are not limited to e-registration for a taxpayer identification number, electronic filing of tax returns, electronic payment of taxes and online application for tax clearance (Wasao, 2014). The e-tax system was primarily introduced and used in American and European countries, particularly in Italy in the 1980s and Greece in 1988 (OECD, 2015). (Night & Bananuka, 2019) The use of online tax systems has positively changed taxpayers' behaviour towards tax compliance. The improvement has been related to easy access to tax services by minimizing physical follow-ups to tax authorities' offices. Haryani et al. (2015) further support that if taxpayers use less energy to adopt the system, it encourages them to comply with taxes.

From the UTAUT and e-Tax System constructs perspective, Performance Expectancy (PE) refers to users' view that using a certain technology will enhance their work performance and output. Effort Expectancy (EE) is a technology boundary intended to reduce the effort required for technology acceptance, adoption and use. By ensuring that tools and applications are spontaneous and easy to traverse, the encouragement of acceptance and use of technology is vital. For instance, providing step-

by-step video tutorials on using certain software on a computer can help overcome initial barriers and boost confidence. The theory (UTAUT) explains how users of a certain technology can create intention and how the intention can be a driver towards the actual usage (actual behaviour). UTAUT divulges how effort expectancy, social influence, performance expectancy and facilitating condition affect behavioural intention and the way intention to perform the behaviour impacts actual use of the technology.

A study by Venkatesh et al. (2016) evidences that behavioural intention to use the system has a positive effect on the actual use of the system. That is, a taxpayer's intention to use a certain system impacts the performance of the behaviour. Moya et al. (2018) indicate a positive relationship between effort expectancy and behavioural intention, which affects the actual usage of the system. That is, when the users of the system apply less effort (effort-free) in using the electronic tax system to pay taxes, their personality will be positive, which eventually affects the actual behaviour of the taxpayer. Therefore, we propose that H1: Effort expectancy positively influences behavioural intention to use the e-tax system and H2: Behavioural intention positively influences the actual behaviour. Facilitating Condition (FC) entails the accessibility of resources, support, and infrastructure essential for technology acceptance and usage. Venkatesh et al. (2012) presuppose that facilitating conditions entail individual beliefs that business organizations or institutions and infrastructure exist to provide facilitation on the use of a certain system. Facilitating conditions, therefore, include external components in the context of the users of the e-tax system, which simplify the involvement in the behaviour or make it difficult to implement the given behaviour. According to Sichone et al. (2017), facilitating conditions comprise two aspects: that is, technologically facilitating conditions and resource-facilitating conditions. This study subsumes facilitating conditions such as access to reliable internet, training programs, and technical support with the e-tax system usage. The study by Venkatesh (2003) indicated a positive influence of facilitating conditions on behavioural intention but a negative influence on actual behaviour. Reves & Booc (2024) have the same results that facilitating conditions relate to behavioural intention. The availability of resources like computers and the internet influences the intention of taxpayers to use the e-tax system. Therefore, we propose that H3: facilitating condition relates to behavioural intention and H4: facilitating condition does not relate to actual behaviour.

Wang et al. (2019) affirm that social influence is the extent to which a certain group considers it imperative for others to use a new system. Social Influence (SI) evaluates the influence of peripheral factors on an individual's decision to accept and use technology. It embraces aspects such as peer pressure, social rules, and support from associates or managers. UTAUT was developed by Venkatesh et al. (2016) based on social cognition theory to expound a system user's purpose in using an electronic system and its subsequent actual behaviour. Venkatesh et al. (2016) emphasize that Performance expectancy and Social Influence affect the intention of users of the system.

Additionally, Valdez-juárez & Maldonado-guzmán (2016) believe that social influence has a positive effect on behavioural intention. The results of the study conducted by Nasution et al. (2024) indicate that social influence significantly affects the behaviour of using the system. Fossung & Warah (2022) are in the same vein that performance expectancy, social influence and effort expectancy affect the behavioural intention and the actual behaviour. Their arguments meant that both factors of UTAUT influence both the intention of the users of the system and the actual usage (tax compliance behaviour) for this study. Therefore, we hypothesize that H5: Social influence relates to behavioural intention to use the system and H6: Performance expectancy has a positive effect on behavioural intention to use a specific system. Hence, users of a certain system will make a decision depending on the facilities and performance of the system. Therefore, users of a certain electronic system will adopt that particular system based on their expectations and social environment. Applying the Structural Equation Modelling (SEM) is of paramount significance as it can test mediator variables and determine the nature of the relationships. SEM is a contemporary analytical method that is used by hodgepodge studies because of its capacity to test both direct and indirect effects in a comprehensive model. SEM uses control variables in assessing the explained variable. However, the assessment is treated separately to assess to include the control variables. For this study, variables such as sex, gender, experience and voluntariness use are variables that can influence both behavioural intention and actual use, but are used as control variables by this study. Previous studies have used these variables as moderator variables.

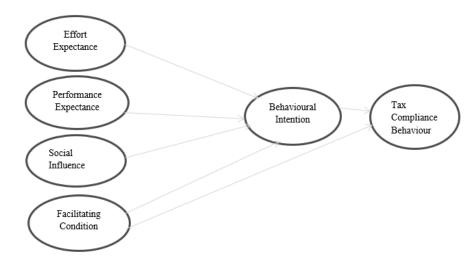


Figure 1. Conceptual Model of the Study

Source: Researcher's Conceptualised from Literature and Unified Theory of Acceptance and Use of Technology Model Venkatesh et al. (2003)

Therefore, indicators for performance expectancy are (relative advantage of the system, outcome expectation of the system, perceived performance of the system and internal or intrinsic motivation). Indicators of effort expectancy are perceived ease of use, perceived complexity and ease of use of the system. Indicators for social influence: peer pressure, social rules, support from managers and friends and relatives. Indicators for facilitating condition: accessibility of resources, support from supervisors, access to reliable internet, training programs and technical support)

3. Materials and Methods

The results of this study were evaluated using IPMA (both for indicators and constructs). IPMA is an analysis that extends the standard PLS-SEM results in reporting the path coefficients' estimates by adding a dimension to examine two aspects of the constructs and indicators, that is, performance and importance (Hair et al., 2019). IPMA compares structural model total effects on a specifically targeted variable in the PLS path model. The total effects of the analysis signify the antecedent constructs' importance in shaping the target construct, while their average variable scores denote their performance. Despite the tests conducted on the measurement and structural model for this study, it was worthwhile to test IPMA. IPM provides evidence on how each given construct is important in explaining the outcome variable. For instance, in estimating the effect of the quality construct (system quality, information quality and service quality), information quality can have an insignificant effect on the explained variable. However, employing IPMA, the same construct can be seen as important in the model. Therefore, using IPMA in this study was important to identify the importance and performance of the given constructs.

IPMA was used to recognize predecessors that have comparatively high importance for the target construct which means those constructs have a strong total effect or relatively low performance (low average variable scores). Fundamentally, these constructs symbolize potential areas of improvement that may receive high attention. The creation of importance-performance required the selection of the target construct of interest, which is tax compliance behaviour in our study. The last stage was the extension of IMPA in measuring the indicators. IPMA allows the analysis of not only the performance of the constructs but also the indicators. This extension provided an opportunity for the researcher to identify the areas that were specifically required to be improved.

3.1. Study Participants

This study employed taxpayers who use the e-Tax System from Business Centres in Dar es Salaam, Tanzania as the sample, with 156 taxpayers involved. The essence of involving taxpayers who are the users of electronic tax systems is to minimize the bias of collecting information that is not relevant.

Including taxpayers who are the users of the e-tax system has an impact on understanding whether the system has assisted them in complying with taxes. On the other hand, Dar es Salaam was selected due to its nature of having many business centres whose taxpayers are the users of the e-tax system. The sample size was drawn based on the techniques used to analyze data. PLS-SEM suggests a 70 per cent requirement for statistical power of a minimum sample size. This study obtained a sample size from a pool of 223 taxpayers from six business centres (223 population x 70%). As suggested in Hair et al. (2017), the minimum sample size in PLS-SEM should be ten times the largest number of structural paths directed at the specific construct in a structural model (inner model). If the model of this study forms six (6) structural paths, then (6x10) yields 60 minimum sample size. Therefore, 156 sample sizes were sufficient to yield a robust result in PLS-SEM. A stratified random sampling technique was used to select a sample. A stratum of six (6) business centres was formed in which twenty-six (26) participants were selected randomly using a fishbowl method.

3.2. *Instrumentation*

A cross-sectional time horizon was adopted in this study, where data were collected at once, and proposed to measure and analyse the formulated conceptual model. The devising of the survey instrument was well-versed by relevant measurement items modified from previous relevant studies on identifying suitable and valid measurement items. A cross-ended questionnaire, in particular, was preferred in this study because of its capacity to improve responses (deterministic philosophical dimension) relative to open-ended questions (voluntaristic philosophy) of human nature.

To ensure the reliability and validity of data, a pilot study of twenty (20) participants was used to create awareness and measure what was required to measure. A pilot study was employed to check the robustness and clarity of the study instruments to establish consistency and minimize the likelihood of providing unreliable results. The reliability of data was evaluated using composite reliability, whereas the validity of the results was tested using the heterotrait-monotrait ratio (HTMTR). HTMTR is a modern method of assessing discriminant validity due to its efficiency in identifying validity levels compared to cross-loadings and the Fornell-Larcker criterion, which performs poorly when indicator loadings of the constructs under consideration differ only slightly (Henseler et al., 2016; Voorhees et al., 2016). The relationship between the constructs and indicators (reflective measurement) was evaluated using Average Variance Extracted (AVE). Path coefficients and collinearity levels were used to determine the constructs' relationship by employing the variance inflation factor (VIF) as suggested by Henseler et al. (2016).

3.3. Data collection procedures and Analysis

Data was collected from taxpayers using a 7-point Likert Scale Questionnaire. A Likert Scale is an ordinal measurement scale, but it can be used as an interval scale by following special procedures using the PLS-SEM. The symmetry of Likert items was used for the middle category to define the level of agreement or disagreement, with 1 indicating very strongly disagree and 7 very strongly agree. Data were analyzed using Partial Least Squares Structural Equation Modelling (PLS-SEM) with reflective model evaluation (relationship between constructs and indicators) and the structural model evaluation (association between constructs) (Hair et al., 2018). In determining the perilous or critical elements with a strong effect on tax compliance behaviour, two evaluations were involved: that is Importance Performance Map of Analysis (IPMA) of the indicators and the IPMA of the constructs as presented in the data. The proxies of this study were measured using the reflective measurement model (relationship between constructs and indicators) and the structural measurement model (relationship between constructs). Data analysis was preceded by screening for missing values and other problems, such as similar values for all enquiries, and incongruous value assignments. A total of 156 questionnaires remained for analysis.

4. Results and Discussion

The results of this study are presented in two ways: firstly, preliminary findings indicate the reliability and validity of the data. In the first stance, the convergent validity is higher proportional

differences of indicators and the discriminant validity that construct differences to minimize the proportional multicollinearity of constructs have been discussed. Secondly, the importance and performance of the constructs are evaluated to show the critical factors for tax compliance behaviour.

4.1 *Preliminary results.*

The measure of reliability and validity of data was vital to determining the relevance of the study instruments and findings in providing rigorous results. It is recommended that values between 0 and 1 composite reliability depict strong reliability. The findings from Table 1 show that all constructs have values less than one (1) composite reliability, indicating strong reliability. This implies that the study measured what was intended to measure and that the same results can be obtained in different situations or places.

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
BI	0.789	0.797	0.863	0.534
EE	0.769	0.807	0.874	0.504
FC	0.778	0.780	0.805	0.510
PE	0.774	0.785	0.842	0.541
SI	0.768	0.779	0.861	0.501
TCB	0.758	0.783	0.824	0.523

Table 1. Reliability of the Constructs

Table 2 indicates that all constructs have values less than 90 per cent. The results imply that the constructs differ from each other and that there is no collinearity among them.

	BI	EE	FC	PE	SI	TCB
BI						
EE	0.886	1				
FC	0.826	0.849	1			
PE	0.811	0.761	0.792	1		
SI	0.792	0.821	0.795	0.687	1	
TCB	0.811	0.750	0.666	0.538	0.595	

Table 2. Discriminant Validity of the Constructs

The results of this study are further divided into three parts. The first part shows the p-value significance level of the indicators for the respective constructs. The first part also reveals the t-statistics, whether the test at a 5% interval level is significant. Lastly, the findings show whether the relationship between the constructs is strong, positive or negative. Figure 1 below shows the information on p-values, t-statistics and path coefficients, which show the associations between constructs and indicators.

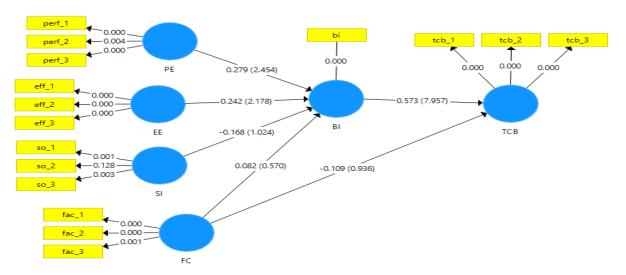


Figure 2. P-values, Path coefficients and t-statistics

Source: Field Data 2024

The findings from Figure 1 reveal that all indicators are significant in explaining the construct except one indicator in social influence (p=0.128>0.05). This divulges that the indicators in the social influence construct explain more than 65% of their respective constructs. The results further indicate that Facilitating Condition (FC), Effort Expectancy (EE) and Performance Expectancy (PE) are important constructs in explaining behavioural intention.

That is, taxpayers' behavioural intention depends on the availability of facilities that help them to use less energy and effort in their compliance behaviour. This has been indicated by the strong relationship between PE, EE and FC on BI (β =0.279, 0.242 and 0.082) respectively. The intention of behaviour to use the e-tax system affects the actual behaviour. As indicated in Figure 1, the results show that behavioural intention is a critical factor in complying with taxes by 57.3% which means only a 42.7% coefficient of determination is explained by other factors on tax compliance behaviour.

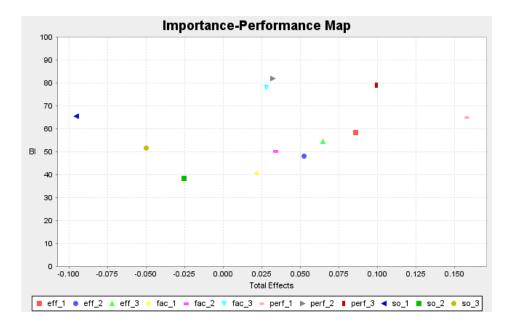


Figure 3. Importance and Performance of UTAUT Indicators on Behavioural Intention Source: Survey Data 2024

Indicators of UTAUT Constructs	MV Performances
Bi	83.257
eff 1	58.486
eff 2	48.165
eff 3	54.358
fac_1	40.596
fac_2	50.000
fac_3	77.982
perf_1	64.908
perf 2	81.881
perf_3	78.899
so_1	65.596
so 2	38.303
so 3	51.606
tcb_1	60.092
tcb_2	63.532
tcb_3	76.147

Figure 4. Importance and Performance of UTAUT Indicators on Behavioural Intention Source: Survey Data 2024

The second part of the findings is the performance and total effects of indicators on behavioural intention. The results in Figures 2 and 3 show that the indicators of performance expectancy are important in explaining behavioural intention. That is more than 81 per cent (0.819) of the effect of performance expectance is explained by indicators of performance expectance. To increase the performance of the indicators of the performance expectancy by one (1) per cent, it needs 0.026 total effects to be changed (Figure 2). On the other hand, indicator (perf 1) has the highest total effect (0.15) on behavioural intention.

This means decision-makers in the taxation arena have to choose what is needed to bring about a total effect, changing the performance of behavioural intention to arrive at the intended objective. If the decision-makers intend to increase the performance of the indicators, then a small change is required to reach the desired decisions. Equally, if the decision-makers intend to have a higher total effect on behavioural intention, then a small change in the performance of indicators is required. All the indicators of the social influence construct have a negative total effect on changing the performance of behavioural intention (So1, So2 and So3) changes are (-0.100, -0.075 and -0.050). Additional indicators of performance expectance, effort expectance and facilitating condition have a positive total effect on behavioural intention (0.026 to 0.15)



Figure 5. Importance and Performance of UTAUT Constructs on Behavioural Intention **Source**: Field Data 2024

The results in Figure 4 reveal that Performance Expectancy (PE) has a high performance on behavioural intention (71.6), followed by Social Influence (SI) (57.4). However, Effort Expectance has the smallest performance on behavioural intention (54.5). Regarding total effects, performance expectance has been reported to have the highest total effects on explaining behavioural intention (0.279), followed by effort expectance (0.242). However, social influence is the only construct that has a negative total effect (-0.168) in explaining behavioural intention.

The results imply that for taxpayers to create an intention for their behaviours to comply with taxes, they expect the system they use to be productive. Additionally, performance expectancy also has a high total effect on behavioural intention. This effect is positive, indicating that, to change the behaviour and create intention towards using the e-tax system, taxpayers need to see how the system increases their expectations in terms of their income, which in turn has an impact on increasing the compliance level.

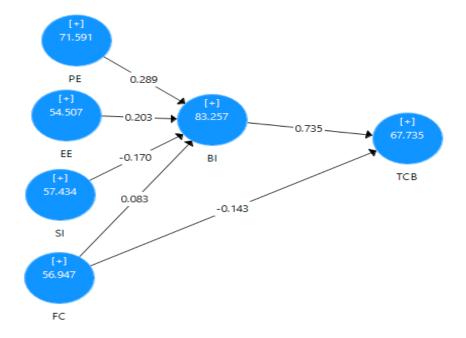


Figure 5: The Importance of UTAUT Constructs on Tax Compliance Behaviour **Source:** Field Data 2024

The third part of the results shows how the constructs perform and affect total tax compliance behaviour (TCB). The results in Figure 5 show that performance expectancy, facilitating condition and social influence have positive effects on behavioural intention. On the other hand, the behavioural intention has high performance and a strong total effect on tax compliance behaviour (83.257) and (0.735) respectively. However, the facilitating effect has a negative total effect (-0.147) on tax compliance behaviour but a positive performance (56.947) on tax compliance behaviour. Equally, effort expectance has a negative total effect on behavioural intention (-0.170) but a positive performance (57.434) on behavioural intention. This implies that a construct might hurt the explained variable but might have a positive performance. There are constructs that several studies drop and consider not to affect the dependent variable, but these constructs might have high performance (are important to taxpayers). This study, therefore, was in a position to reveal the critical factors for tax compliance purposes. From these findings, behavioural intention is a critical factor that has a high impact on tax compliance behaviour.

4.2 Results Discussion

The main objective of this study is to reveal the critical factors for tax compliance behaviour by employing a Unified Theory of Acceptance and the Use of Technology. The findings of this study reveal that behavioural intention is a critical factor in explaining tax compliance behaviour. That is, behavioural intention has high performance and a strong total effect on tax compliance behaviour (β =0.735). Performance expectancy performs highly on tax compliance behaviour. This implies that by using the e-tax system, taxpayers are required to create an intention. Creating behavioural intention is a result of how the system that taxpayers use to make compliance easy and effort-free is useful. The findings are in the same vein of Fossung and Warah (2022); Valdez-Juarez and Maldonado-Juazman (2016) and Wang et al. (2019) which proclaims that when the system used by taxpayers enables taxpayers to improve their businesses and use less energy to employ or adapt them, it enhances their behavioural intention to use the system and eventually enables them to do the actual behaviour (comply with taxes).

Increasingly, the findings of this study are supported by studies on the taxation context that when taxpayers are motivated by individual groups who pay taxes, they drive intention towards using the system (Omary, 2022; Saptono, 2023). The results show that the facilitating condition also relates to behavioural intention (performance of 56.9%). The findings imply that the availability of resources for taxpayers in terms of computers and their peripherals, such as reliable internet to use the system, drives more intention to comply with taxes. When taxpayers are motivated by the available resources, they induce intention towards the actual use of the system (tax compliance behaviour). The results are consistent with those of Reyes and Booc (2024) and Venkatesh et al. (2012), who advocate that the availability of resources influences the behavioural intention to adopt the system. However, facilitating conditions revealed a negative direct effect on tax compliance behaviour. That is, to enhance tax compliance behaviour, taxpayers are required to create an intention towards the system. Creating the intention to perform the actual behaviour requires factors that drive taxpayers to perform that behaviour. In that case, the facilitating condition induces a positive effect on behavioural intention, which indirectly affects the performance of the taxpayer's compliance behaviour.

Surprisingly, the findings indicate that social influence evidenced a negative effect on behavioural intention. This implies that peer groups, business friends and all those who are friends to taxpayers have not influenced taxpayers to create an intention towards complying. This is an indication that in the environment of Tanzania, taxpayers who are not compliant or who are not performing well in tax matters cannot influence other taxpayers to create an intention towards a compliance attitude. However, in some other countries, friends and other peer groups are influential on taxpayers to comply with taxes. This has been evidenced by Valdez-juárez & Maldonado-guzmán (2016), Nasution et al. (2024), and Fossung & Warah (2022), whose findings show that social influence relates to behavioural intention to comply with taxes.

In conclusion, the findings of this study it is apparent that behavioural intention enhances tax compliance behaviour. However, to increase compliance behaviour, behavioural intention should be linked with performance expectancy, effort expectancy and facilitating conditions. The three factors (performance expectancy, effort expectancy and facilitating condition) have been reported by this study

to have higher performance and are important in changing the behaviour of taxpayers in complying with taxes. Therefore, four hypotheses that are H1, H2, H3 and H6 have been supported based on the findings of this study.

5. Conclusion and Recommendation

The purpose of this study was to reveal the Critical Factors for Tax Compliance from UTAUT and the e-tax System Linkage: An Application of Importance-Performance Map Analysis. This study summarises the key findings and provides recommendations on the findings obtained. Based on the findings, this study shows that behavioural intention is a critical factor in explaining tax compliance behaviour. The results also indicate that performance expectancy and social influence are key factors that enhance the performance of taxpayers to comply with taxes. This implies that tax authorities, when introducing or designing electronic tax systems for the use of taxpayers, should design them in a manner that enhances the productivity or performance of the businesses of taxpayers.

Based on the theoretical perspective, the authorities responsible for collecting taxes and the formulation of tax policies should consider the roles played by social groups in influencing the intention of taxpayers to comply with tax matters. The researcher recommends that the government, through the authorities responsible for taxes, should improve the ability of taxpayers to use the e-tax system. This includes simplifying the process of paying taxes using the e-tax system (effort-free) of the designed system, restructuring the system to incorporate the important factors that increase the performance of the system.

The authorities responsible for taxes are recommended to build trust in the use of the e-tax system by providing the necessary resources (facilitating conditions) that include how the system will secure taxpayers' data, reliability in services provided by tax authorities and transparency in taxpayers' data management. The government should adopt an evaluation approach to the e-tax system and collect feedback from taxpayers to make reiterative improvements. Therefore, improved tax compliance behaviour can be achieved through the effective use of online tax systems by addressing the critical factors (behavioural intention) and high-performance factors (Performance expectancy and social influence) revealed in this study.

6. **Implication of the findings**

The findings of this study have two contributions: contributions to policy making and theoretical contributions. This study has a critical implication bearing on tax revenue policy and specific tax laws. This study examines policy interventions and practices on the critical factors that enable policymakers to focus when making tax policies. As indicated in the findings of this study, behavioural intention is a critical factor that has shown great importance and performance in affecting tax compliance behaviour.

Issues listed in the specific policy, such as effectively monitoring the use of the e-tax system, enforcing the use of the electronic system, and enforcing the registration of new taxpayers, form the basis for compliance but are based on an enforcement approach. For good practice, the government needs to consider important factors that perform well in causing taxpayers to comply with taxes. Changing taxpayers' behaviour is not easy and cannot be done in one day.

However, considering factors such as behavioural intention, performance expectancy, effort expectancy, social influence, and facilitating conditions is critical in making taxpayers pay taxes voluntarily. The government is required to consider factors that can create intention and change the behaviour of taxpayers. When the system used by taxpayers to register and pay taxes is simple and productive for taxpayers fosters behavioural intention for tax compliance behaviour. Theoretically, this study extends the Unified Theory of Acceptance and Use of Technology by linking it to the e-tax system to explain tax compliance behaviour. By using UTAUT, the study proves and it is evident that behavioural intention is a more influential factor and relates to tax compliance behaviour.

7. Limitations of the study

This part presents the limitations that this study experienced in undertaking this study. There are many limitations across studies. However, this study concedes the following limitations:

This study is based on a cross-sectional time horizon and intends to discover the critical factors for tax compliance behaviour. Data collected at a single point in time revealed the critical factors that influence taxpayers' behaviour. However, data collected from a cross-sectional study hinders the ability to identify taxpayers' behaviour over time, considering that taxpayers' behaviour can change over time.

Future studies are advised to use other approaches to a survey, such as the longitudinal time horizon (panel, time series, and cohort), where data can be collected at a different point in time to analyze how the events or the perceptions of taxpayers can change over time, because taxpayers' perceptions are likely to change over time. The application of a longitudinal time horizon will enable researchers to study the changes in the behaviour of taxpayers because the behaviour of taxpayers can change over time.

This study involved only data from the quantitative phase, which limits the voluntaristic paradigm of obtaining insight from the qualitative part. Future studies can collect both quantitative and qualitative data to provide a holistic view of the electronic tax system for compliance.

Lastly, this study was limited to Tanzania to identify what factors are more influential to tax compliance behaviour. Future studies can be conducted outside Tanzania to compare the compliance behaviour of different taxpayers across countries.

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