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## ELECTRONIC FILING OF TAX RETURN AND TAX COMPLIANCE BEHAVIOUR IN KWARA STATE, NIGERIA

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### Abstract

*Digitalization of tax system has promoted efficient electronic filing of tax return as well as enhancing tax compliance behavior across the world. However, over the years, tax compliance behaviour as a result of adoption of electronic filing of tax return has been subjected to several complaints and criticisms in Nigeria due to slow network, system failure, various submission errors in filing of tax return, cybercrime due to lack of internet security. The study therefore, examines the relationship between e-filing of tax return and tax compliance behavior in Kwara State. The specific objectives of this study were; (i) evaluate the effect of electronic tax filing system adoption on tax compliance behaviour in Kwara State, and (ii) examine the effect of attitude towards an electronic tax filing system on tax compliance behavior in Kwara State. The study adopted a survey research design and random sampling technique was employed to quantitatively select 222 active registered taxpayers in Kwara State. The primary data obtained was analyzed using a Partial Least Square-Structural Equation Modeling (PLS-SEM) technique analysis. This study found that adoption of e-tax filing and attitude towards e-tax filing have positive and significant effect on tax compliance behaviour as shown by t-values of 3.069, 3.042 with p-value of 0.003, 0.005 at 5% level of significance respectively. This implies that that adoption of e-filing of tax return and attitude towards e-filing of tax return have increased tax compliance rate significantly. The study recommends that KW-IRS should further scale up its electronic filing system thereby improving tax compliance rate. In addition, KW-IRS should continue to put more effort in ensuring a strong and robust security system standby to protect taxpayers' confidential information transmitted over the internet against cybercrime.*

**Keywords:** E-tax filing system, Adoption, Attitude, Tax Compliance.

### 1. Introduction

The rapidly increasing pace of technological change and the resultant effect on revenue performance and tax compliance have proven that no nation can truly develop without strategically digitalizing the tax administration system (Cheboi & Bruce, 2021; Katua, 2020). Tax digitalization through electronic tax registration, electronic tax identification as well electronic filing of tax return has been reported to combat tax evasion, leakages and tax frauds, facilitate tax compliance and satisfy information requirements at the operational and internal control levels for the effective management of a

modern tax administration (Organization for Economic Co-operation and Development (OECD), 2016).

In developed countries like the United State of America, electronic filing of tax return which was reported to have commenced in the year 1986 in the United State of America by the USA Internal Revenue Service has now grown to the level that most individual tax payers in developed countries like Australia, Canada, Italy, United Kingdom, Chile, Ireland, Germany, France, Netherlands, Finland, Denmark, Sweden, Switzerland, China filled their tax returns electronically (Olatunji & Ayodele, 2018; Kinyua, 2019). This development can be attributed to numerous enhancements and features being added to the program over the years.

Various developing countries such as Malaysia, Rwanda, Tanzania, Uganda and Nigeria have also embraced the automated electronic filing of tax documents and tax returns as well as some other electronic tax services (Olaoye & Ekundayo, 2019), which the objective of increasing effectiveness and efficiency, increase tax collection, increase tax compliance and tax equality in the country (Kinyua, 2019; Katua, 2019), minimizing delays in filing of tax returns and reduce operational costs (Aliah, 2020).

Notwithstanding, the approval given to the Federal Inland Revenue Service (FIRS) by the Nigerian Federal Executive Council in December 2010 to procure, install and implement the Integrated Tax Administration System (Irefe-Esema & Akinmade, 2017), there are numerous teething problems with the electronic tax filing (e-filing) system posing big challenges to revenue agencies in Nigeria, as complaints from stakeholders show that some users were not aware of the functionality and benefits of the e-filing system while some taxpayers criticized that the system has negative effect due to various operational challenges such as slow network, system failure, poor electric power supply (MacIver, Bell & Nedd, 2021). The resultant effects of all these challenges include submission of incomplete information as well as will as the confidential information transmitted over the internet could be intercepted and stolen through cybercrime (Rifat, Nisha & Igbal, 2019).

Despite the role of electronic tax filing system in minimizing compliance cost and increasing the value of business (Masunga, Mapesa & Nyalle, 2020), there are few academic discourses that link electronic tax filing system to tax compliance behavior (Rokhman et al., 2023; Mekonnen, 2021; MacIver, Bell & Nedd, 2021; Masunga et al., 2020). It is also remained unclear and imprecise on the reluctant, unwillingness, and hesitancy of taxpayers to register, and use the e-tax filing system and the reasons for being used are not well documented (Mandari, Koloseni & Nguridada, 2017; Rokhman et al., 2023). This study, therefore, sought to bridge this gap in knowledge by determining the effects of electronic filing of tax return on tax compliance behavior in Kwara State. The specific objectives of this study are to; investigate

the effects of adoption of electronic tax filing system on tax compliance behavior and, examine the effect of attitude towards electronic tax filing system on tax compliance behavior in Kwara State. Based on the objective of the study, the following hypotheses are formulated and tested in the study:

H0<sub>1</sub>: Adoption of an electronic tax filing system has no significant effect on tax compliance behavior in Kwara State.

H0<sub>2</sub>: Attitude towards an electronic tax filing system has no significant effect on tax compliance behavior in Kwara State.

## 2. Literature Review

### 2.1 Conceptual Issues

The conceptual domain of the variables used in this study was arrived at through the evaluation of various descriptions given to each of the variables (Electronic Filing of tax returns and tax compliance) in the literature.

Electronic filing of tax returns (e-filing) system has been described or defined in the literature from different perspective. According to Simpen, Abdi, Fahlevi and Noviantoro (2019), e-Filing system is the electronic submission of annual tax returns instead of manual paper use, which is directly connected to the tax system in a country. E-filing refers to the process of filing of income tax return electronically via internet (FIRS, 2021). Tambun and Kopong (2017) opined that e-filing system is a way of delivering the notification letter through the online system and real time. Hence, taxpayers no longer have to stand in long queues to file income tax returns (Alimi & Didi, 2021; FIRS, 2021). Summarily, Electronic tax filing (e-filing) is a process where documents or tax returns are submitted through the internet usually without the need to submit any paper return (as identified by Mururi & Kiarie, 2015).

Electronic Filing of tax return requires taxpayers to have an email address, log on to the website of the tax office and download the relevant form. Pertinent information must be filled such as taxpayer's name, address, identification number, exemption, income, tax credit/deduction, other taxes and payments, amount

owed and so on. After filling the tax return form, the taxpayer signs the tax return forms using a self-selected identification number and files it using the tax office. Upon submission of the filled return form, the returned and entire electronic record is transmitted to the tax office for processing where free file is being utilized. An email is sent to the taxpayer as soon as the tax return is received. Subsequently, the tax return is assessed, with the taxpayer's tax calculated within 48 hours. Where errors are detected, an error message is sent to the transmitter to correct and re-transmit the return to the tax office (Kwara Internal Revenue Service, 2021). Customized return forms have been devised by the revenue agencies which is available on the site of the departments. The e-filing system encompasses the use of internet technology, the Worldwide Web and Software for a wide range of tax administration and compliance purposes. Filing of tax return is submitted electronically at the site (Zaidi, Henderson & Gupta, 2017). According to Ragupathi and Prabu (2015), there are two benefits of filing taxes electronically; e-filed returns cost, lesser processing time when compared to a paper return and as well as increased the taxpayers' compliance level (Tambun & Kopong, 2017).

Tax compliance is the degree of responsiveness of taxpayers to tax obligations (Oladele, Aribaba, Adediran & Babatunde, 2020). Tax compliance is perceived to be behavioural induced toward government actions on provision of basic infrastructural amenities. However, the determinants of tax compliance are: social psychological issues, political, industry, business and economic among others (Oladele et.al, 2020). Strategically, meeting taxpayers' needs through the provision of essential amenities, transparency and accountability and among others can induce voluntary compliance. According to Akintoye (2013), the provision of infrastructural amenities, moral ethics, tax rate, tax accountability and confidence in government, the level of service delivery and the efficient system of tax payment in Nigeria motivated the voluntary compliance to pay tax by taxpayers. Thus, an efficient compliance strategy increases revenue generation positively (Appah & Ogbonna, 2014). According to (OECD, 2011), the extent to which compliance (e.g.

filing, reporting and payment) has improved as a result of revenue body activities would clearly be an indication of a revenue body's effectiveness. There are four basic tax compliance obligations of citizens and businesses that generally speaking must be administered by all revenue bodies in accordance with their respective tax laws: to register for tax purposes; to file tax returns on time (i.e. by the date stipulated in the law); to correctly report tax liabilities and to pay taxes on time (Twesige, Gasheja, Baryandama & Aegis, 2019).

## 2.2 Theoretical Framework

This study is theoretically anchored on the Technology Acceptance Model (TAM), which was propounded by Fred Davis 1989 and later modified as Unified Theory of Technology Acceptance by Venkatesh and Bala in 2008. TAM predicts that the acceptability of a technological tool will influence the organizational restructure (Köck, 2017). The Unified Theory of Technology Acceptance is relevant to this study as it helps users in understanding of electronic tax service (electronic filing of tax return), its perceived ease and usefulness of electronic tax services and how this enhances tax compliance. The theory also explained the effectiveness of the digital tax tools in registering of all potential and protecting registered taxpayers' data from agency data based, submission of complete information in e-filing, simplifying payment of tax and by this tax compliance can be enhanced among taxpayers. These were predicted by TAM with aim of achieving the research objective one and two of this study. The adoption of, and attitude towards electronic tax filing system would have positive impacts on tax compliance. The theory is relevant to the study on two research objectives raised. Therefore, this theory supports the adoption of e-tax filing system and attitude towards e-tax filing system). It explains tax authorities' use of technology in this case e-service with expectation of increasing tax compliance rate, as well as how they found it useful and easy to use. It is simply because they found it useful and easy to use.

## 2.3 Empirical Review

This section reviews previous research evidence on the electronic tax filing and its effect on tax compliance

which form the basis of this study hypothesis. For instance, Arora and Gupta (2018) examined the level of awareness of taxpayers about e-filing. Survey research design was used to gather the data for this study. Ranking technique, ANOVA-test and Factor Analysis were used to analyze the data. The findings of the study revealed that certain differences exist in the awareness level of the taxpayers regarding basic knowledge about provisions of the Income Tax Act as well as for the advanced knowledge of e-filing. In a similar study conducted by Aliffiani and Fuadah (2018), on the perception of online tax filing in Indonesia, the study employed survey design and primary data were generated by distributing online questionnaire across target respondents. The data were analyzed using Structured Equation Model (SEM). The results showed that trust in technology positively affected the trust in e-filing system, which subsequently influence all three the information system quality dimensions. Information quality, system quality and service quality were found to be consistently and significantly influenced the perceived usefulness and user satisfaction.

Solichah and Soewarno (2018) investigated the effect of e-tax filing on tax compliance in Harare, Zimbabwe. The study employed primary data as a source of data collection with a aid of questionnaire distributed. Analysis of data was done through descriptive and inferential statistics. The study revealed that electronic filing system actually influences tax compliance. The study also revealed that there was a positive attitude by clients towards electronic filing; electronic tax filing has also influenced the ease of doing business. In his own study, Yagnesh (2018) also maintained that there was significant relationship between electronic tax filing and tax compliance. Though not quite recently, Obert, Rodgers, Tendai and Desderio (2018) considered tax revenue as dependent variable. The results of the analysis revealed that: electronic filing of tax actually influenced tax revenue; that there was a positive attitude by clients towards electronic filing and finally, that electronic filing has also significantly increased tax revenue and the ease of doing business. Bharathi and Mathiraj (2020) examined the perception of assesses on e-filling of tax returns in

Tamil Nadu. This study employed the primary data collection method through questionnaire. The study analyzed the data using the descriptive statistics, and inferential statistics is Ordinary Least Square techniques used to test hypotheses. The results showed that the electronic filing of tax return has no significant effect on tax compliance. This implies that taxpayers are not satisfied with the usage of the system due to difficulty in network problems in submitting the electronic tax documents.

Purba, Nugroho and Sarpingah (2020) carried out a study on the effect of implementing e-filing systems on personal tax compliance with internet knowledge as moderated variables, on personal taxpayers in Jakarta, Indonesia. The study adopted mixed method through primary and secondary data gathering appropriately. The analysis of the data in the study was carried out using descriptive statistics and inferential statistics. The study showed that implementation of the e-filing system holds a positive and substantial effect on taxpayer compliance. There were evidences of better implementation of the e-filing system and taxpayer compliance usefulness; Knowledge of the Internet has been tried to control the relationship between the implementation of e-Filing systems and the level of taxpayer compliance. In their study, Alimi and Didi (2021) investigated the e-filing intentions of income tax return and compliance behavior in Nigeria. The study adopted a systematic Literature review method. The results revealed that outcome of the study will be beneficial to the government, tax authorities and other relevant stakeholders in understanding the knowledge of taxpayer's decision making which could lead to better strategic planning and improved revenue performance. Similarly, Mustapha, Rildwan, Sadiq, Moronke, Ahmad and Rahmon (2021) examined the effect of integrated tax filing management system on tax compliance behavior in Nigeria. The results showed that most of the respondents are aware that the integrated system was effective for the increment in the level of revenue generation and tax compliance level in Nigeria.

Also, Ajayi and Yidiat (2021) investigated the impact of e-tax filing on tax revenue generation in Nigeria. The study used secondary data which were



sourced from Central Bank Quarterly data from the Federal Inland Revenue Service (FIRS). Based on the results obtained through inferential statistical analysis, it was found that e-tax filing only had significant influence on oil tax revenue in Nigeria. Further results revealed that e-tax system has no significant impact on total government tax revenue and non-oil tax revenue in the country.

In a study conducted by Utama, Nimran, Hidayat and Prasetya (2022) in Malaysia, various independent variables like religiosity, perceived risk and attitude to measure determinant of e-filing examined the effect of religiosity, perceived risk, and attitude on tax compliant intention, moderated by e-filing in Malaysia. The study employed primary data collection technique. The study found that attitude has a positive and significant effect on Tax compliant intention. Further result also showed that e-filing has an insignificant moderating effect on the research model. In a related study, Timpany and Lu (2022) investigated the impact of electronic filing of tax return on update of Hong Kong SAR's Inland Revenue Department in China. The study employed primary and secondary data as sources of data collection. The results showed that there was significant positive relationship between IT leadership in filing of tax return and tax compliance; implying that the increase in online tax return reporting compliance was due to a massive campaign carried out by the Tax Offices in terms of services, counseling, public relations, and IT infrastructure upgrades. With different a more elaborate view, Rokhman, Handoko, Tobirin, Antono, Kurniasih & Sulaiman, (2023) analyzed the effects of the application of e-government, e-billing and e-filing (e-SPT) on taxpayer compliance. The study adopted a quantitative research approach and elicits information from Indonesian taxpayers in which the sampled respondents were 430 respondents who filled out the Likert Scale questionnaire. The sampling technique in this study was incidental sampling, with research instruments using online questionnaires distributed via social media. The data analysis technique in this study used a structural equation model (SEM) with SmartPLS 3.0 software. The results of this study indicate that the application of e-government had a positive and

significant effect on taxpayer compliance, the application of e-billing had a positive and significant effect on taxpayer compliance, and the application of eSPT had a positive and significant effect on taxpayer compliance.

In their own angle, Lamidi, Olowookere, Saad and Ahmi, (2023) investigated the determinants of the intention of taxpayers to adopt e-filing system in Nigeria. Based on the technology acceptance model (TAM) and technology readiness index (TRI) theory, 175 self-employed taxpayers in the Lagos State of Nigeria have responded to the survey conducted. This study found that technology readiness (TR), perceived usefulness (PU) and perceived ease of use (PEOU) have positive relationships with the intention to adopt the e-filing system. However, the result indicates that only PEOU is a statistically significant factor influencing the intention of taxpayers to adopt the e-filing system.

### 3. Methodology

This study investigated the effect of electronic filing of tax returns on tax compliance behavior using a quantitative paradigm. The study adopted cross-sectional survey design. The population of the study consists of total number of 3,614 active registered taxpayers representing direct assessment for state in Kwara Central District (Asa, Ilorin-East, Ilorin-South, and Ilorin West Local Government) in Kwara State, Nigeria. The choice for Kwara Central Districts is because they have the largest numbers of active registered taxpayers as at 1<sup>st</sup> of January, 2020 to 2022. From the 3,614 population of the study, a sample size of 360 active registered taxpayers was determined using Taro Yamane formulae (Yamane, 1976) and the simple random sampling method was used to select the 360 active registered taxpayers after stratification was done. The sample size of 360 was mathematically obtained through the use of Taro Yamane formulae (1976) as shown below.

$n = N/(1+(Ne^2))$ , where  $n$  = the required sample size,  $N$  = Study Population or Sampling frame,  $e$  = error limit (0.05 on the basis of 95% confidence level). Therefore, based on 95% confidence level, the sample size is computed below:

$$n = 3,614 / (1 + 3,614(0.05)^2) = 360$$

The data were sourced and collected through questionnaire administered to the target respondents. The responses of the respondents emanated from the questions and the instrument was scored a 5-point Likert scale, ranging from strongly disagree (5) to strongly (1). Quantitatively, to ensure the research instrument substantially and adequately reflect the meaning of the construct to be used, discriminant validity was measured using expert evaluation and Heterotrait-Monotrait Ratio (HTMT) respectively. To ensure stable and similar results under consistent, perspective of reliability in term of stability and internal consistency was measured using construct reliability through the use of Cronbach's alpha, rho\_A and Composite Reliability respectively.

### 3.1 Model Specification

The model of Night and Bananuka (2020) was adapted for this study. Night and Bananuka (2020) assessed the association between electronic tax system and tax compliance. The model is similar to this study's argument, as predicted by technology acceptance model that electronic tax filing system practice improves tax compliance behaviour.

$$TC = \beta_0 + \beta_1 ADTS_1 + \beta_2 ATTFS_2 + \varepsilon \dots \dots \dots (1)$$

Where; TC = tax compliance; ADTS = adoption of electronic tax system, ATTFS = attitude towards

electronic tax system,  $\beta$  = regression coefficients;  $\varepsilon$  = coefficient error. The model of this study is stated as follows:

$$TC = \beta_0 + \beta_1 ADFS_1 + \beta_2 ATFS_2 + \varepsilon \dots \dots \dots (2)$$

Where; TC = tax compliance (using OECD metrics); ATFS = attitude towards electronic tax filing system; AFS = adoption of electronic tax filing.  $\beta$  = regression coefficients;  $\varepsilon$  = coefficient error.

The study employed descriptive and inferential statistics. Descriptive statistics such as mean, median, maximum, minimum, standard deviation was used in order to provide a snapshot about the dependent and independent variables. The Skewness and Kurtosis of the data were also analyzed in order to ascertain the normality of the data distribution. The inferential statistics employed was Partial Least Square – Structural Equation Modeling (PLS-SEM). PLS-SEM was employed to obtained quantitative data from randomly selected registered active taxpayers at Kwara central districts in Kwara State.

## 4. Result and Discussions

### 4.1. Descriptive Statistics Analysis

The summary of descriptive statistics results of data collected for each of the variables employed in this study was presented in Table 1

**Table 1: Descriptive Statistics on Electronic Filing of Tax Returns**

Items	Valid	Mean	Median	Minimum	Maximum	Standard deviation	Excess Kurtosis	Skewness
ADFS1	222	4.111	4.000	1.000	5.000	0.790	0.875	-0.702
ADFS2	222	3.909	4.000	1.000	5.000	0.805	0.149	-0.303
ADFS3	222	4.030	4.000	1.000	5.000	0.858	0.305	-0.643
ADFS4	222	4.101	4.000	1.000	5.000	0.859	0.806	-0.879
ATFS1	222	4.162	4.000	1.000	5.000	0.762	1.532	-0.842
ATFS2	222	3.939	4.000	1.000	5.000	0.722	1.512	-0.561
ATFS3	222	3.980	4.000	1.000	5.000	0.791	0.802	-0.585
ATFS4	222	4.152	4.000	1.000	5.000	0.880	0.418	-0.845
TC1	222	4.162	4.000	1.000	5.000	0.849	1.200	-1.022
TC2	222	4.020	4.000	1.000	5.000	0.816	0.257	-0.490
TC3	222	4.121	4.000	1.000	5.000	0.820	0.476	-0.677
TC4	222	4.111	4.000	1.000	5.000	0.777	1.083	-0.723

Source: Author's computation (2023) using SmartPLS-3

Whereby: ADFS = adoption of filing of tax return system (proxy with ADFS1, ADFS2, ADFS3, ADFS4) and ATFS = attitude towards filing of tax return system (proxy with ATFS1, ATFS2, ATFS3, ATFS4) and TC = tax compliance (using measurement indicator of TC1, TC2, TC3, TC4). The descriptive statistics in Table 1 showed the maximum value of 5 and minimum value of 1 the scale for the variables used, represent strongly agree and strongly disagree. This implied that some respondents were strong oppositions to some instruments employed for the variables while some were strongly in support of the statements raised in the questionnaire. In the Table 1, the Mean and standard deviations were obtained to summarize the observed data (Field, 2009). The mean score of responses from respondents ranged from 3.909 to 4.162. This represents an acceptable value for the data obtained for the variable as the value of 3.909 is within the recommended value of 3 and above based on Nik, Jantan and Taib (2010) interpretation of level of the score from likert scale questionnaire. The highest mean score of 4.162 with standard deviation of 0.3. The mean and standard deviation for adoption of

filing of tax return and attitude towards tax return were depicted in the Table 1 as a result of responses from demand side (the active taxpayers registered with KW-IRS) as respondents of this study. In addition, Skewness and Kurtosis were also assessed to indicate whether the data were normally distributed. It clearly appeared in the table that those data were normally distributed as the numerical values are within the range of -1 to + 1. Hence, the data distributions are considered normal (Hair, Anderson, Tatham & Black, 1998; Hair et al., 2019).

#### 4.2 Correlation Analysis

In examining the strength of linear associations among the variables, the Pearson correlation matrix (coefficient) was employed and the threat of multicollinearity among the variables was also tested using indicator correlation approach and results were presented in Table 2. The table 2 below presented Pearson correlation matrix for all independent variables based on the 222 sampled respondents (active registered taxpayers).

**Table 2: Pearson Correlation Matrix**

	ADFS1	ADFS2	ADFS3	ADFS4	ATFS1	ATFS2	ATFS3	ATFS4	TC1	TC2	TC3	TC4
ADFS1	1											
ADFS2	-0.016	1										
ADFS3	-0.184	-0.04	1									
ADFS4	0.103	-0.104	-0.182	1								
ATFS1	0.306	0.255	0.07	-0.056	1							
ATFS2	0.153	0.268	0.052	-0.039	0.348	1						
ATFS3	0.084	0.108	0.09	-0.056	0.408	0.546	1					
ATFS4	0.077	0.119	0.128	0.14	0.189	0.078	0.12	1				
TC1	-0.042	0.125	0.826	-0.009	0.131	0.197	0.17	-0.006	1			
TC2	0.106	0.086	0.326	-0.003	0.125	0.156	0.22	0.08	0.491	1		
TC3	0.057	0.154	0.181	0.183	0.098	0.183	0.284	0.142	0.436	0.57	1	
TC4	0.194	0.048	0.101	0.15	0.226	0.246	0.234	0.167	0.371	0.522	0.581	1

Source: Author's computation (2023) using SmartPLS-3

The result from Table 2 showed that all the independent variables were positively and negatively related to one and other. Generally, results from the correlation analysis revealed that there were no multicollinearity problems as all the independent variables showed a value of less than the proposed cut-off point of 0.7 (Kennedy, 2008) and neither exceeding 0.5 (Gujarati & Porter, 2010).

#### 4.3 Inferential Statistical Analysis

The inferential statistics was measured using Partial Least Square-Structural Equation Model (PLS-SEM) to examine the relationship among variables under consideration: both latent variable and manifest variable were measured through the specification of the two models which are measurement model and Structural model.

#### 4.4 Measurement Model

The measurement model was assessed for construct reliability and validity as well as the assessment of

discriminant validity analysis. The results of measurement model are presented in the Table 3 below

**Table 3: Assessment of Construct Reliability, Validity and Discriminant Validity**

Construct Reliability and Validity Analysis				Discriminant Validity Analysis			
	Cronbach' Alpha	rho_A	Composite Reliability	Heterotrait-Monotrait Ratio (HTMT)			
ADF	0.758	0.701	0.748		ADF	ATF	TC
ATF	0.711	0.798	0.773	ADG			
TC	0.797	0.808	0.867	ATF	0.729		
				TC	0.506	0.746	

Source: Author's Computation (2023) using SmartPLS-3.3.9

The measurement model was assessed for construct reliability and validity. The reliability of variables was assessed using Cronbach' Alpha, rho\_A and Composite Reliability statistics. These assessment were within and greater than the recommended value of 0.700 (Wasko & Faraj, 2005) and threshold of 0.50 recommended by Chin (1998). In relation to the validity of measurement model, test of validity (accuracy) was conducted on the research instrument using discriminant validity assessment. Discriminant validity was assessed using Heterotrait-Monotrait Method Ratio (HTMT) criterion as suggested by Hair, Hult, Ringle, Starstedt and Thiele (2017). The assessment of the correlations' heterotrait-monotrait ratio (HTMT) was used to assess the discriminant validity and the result was presented in Table 3. This approach showed the estimation of the true correlation between two latent variables. A threshold value of 0.90

has been suggested for HTMT (Henseler, Ringle & Sarstedt, 2015), value above 0.90 shows a lack of discriminant validity. According to Henseler, Ringle & Starstedt, 2015), heterotrait-monotrait ratio of correlations with values lower than the (conservative) threshold of 0.85 is acceptable. Therefore, discriminant validity is established. Furthermore, the confidence interval of the HTMT should not involve the value of 1. Table 3 showed that HTMT criterion has been fulfilled for our PLS model.

#### 4.5 Assessment of the Structural Model

The structural model reflects the paths hypothesized in the research framework. In evaluating the structural model of the PLS-SEM path coefficient was involved and exhibited in Table 4.

**Table 4: Analysis of Significance of Path Coefficient**

Constructs	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	TStatistics ( O/STDEV )	P-Values
ADF->TC	0.277	0.326	0.090	3.069	0.003
ATF->TC	0.243	0.279	0.080	3.042	0.005

Source: Author's Computation (2023)

Table 4 showed the path coefficients of the model and their respective level of significance. Accordingly, adoption of electronic tax filing system (ADF) and attitude towards electronic tax filing system (ATF) showed significant positive impacts on tax compliance. The hypotheses: one and two were failed to be rejected.

The evidence implied that the practices of electronic tax filing system provided explained to a great extent variation in tax compliance in Kwara State. The path coefficient's significances were generated from resampling techniques (bootstrapping). To assess the significance weights of the formative indicators,



Lohmoller (1989) recommended  $>0.1$  weight for an indicator. The result revealed that the indicators' weights were above recommended value of 0.1. Therefore, Table 4 revealed that all weights of formative indicators were having significant t-values that have provided an empirical support to retain all the indicators (Hair et al., 2011; 2019). In further assessment of the goodness of fit, hypotheses were tested to ascertain the significance of the relationship.

#### 4.6 Discussion of Findings

This study examined the extent to which the variation in tax compliance can be explained by the effect of electronic filing of tax return.

The first objective of this study sought to evaluate the effect of an adoption of electronic tax filing system on tax compliance in Kwara State. In the coefficient Table 4, it was deduced that adoption of electronic tax filing system has a positive and significant influence on tax compliance ( $\beta = 0.277$ ,  $t = 3.069$ ,  $p < 0.05$ ). In essence, the practicality of e-filing system seems to have potency in increasing tax compliance rate. By implication the system leaves less room for manipulation of information regarding taxpayer's returns filed, is easy to use and since adequate training and tax education have been acquired by the users of the system, as well as awareness of the system's functionality and benefits to taxpayers in saving time and cost. The result of this study is in line with the findings of Alimi and Didi (2021), Ruchika and Jain (2017). But the finding is contrary to the findings of Ajayi and Oyeniyi (2021); Obara and Nangig (2017); that electronic filing of tax return has negative effect on tax compliance and there were the problems of lack of reliable tax database and the prevalence of cash transactions impeded government revenue generation in Nigeria. The technology acceptance model adopted also show how electronic users perceive usefulness of e-filing system as effective and efficient in submission of complete information of the tax returns to the revenue agency.

The second objective of this study sought to evaluate the effect of attitude towards electronic tax filing system on tax compliance in Kwara State. In the coefficient Table 4, it was deduced that attitude towards

e-tax filing system has a positive and significant effect on tax compliance ( $\beta = 0.243$ ,  $t = 3.042$ ,  $p < 0.05$ ). In essence, the attitude towards e-tax filing system seems to have potency in increasing tax compliance rate. By implication it has a strong security system to protect taxpayers confidential information transmitted over the internet against cybercrime. It also, portrayed that the system is accurate, fast and more convenient than manual and not affected by network and power supply interrupted when submitting tax information electronically. The result of this study is in line with the findings of Night and Bananuka (2018), Ruchika and Jain (2017). But the finding was contrary to the findings of Mekonnen (2021); Obara and Nangig (2017); that electronic filing of tax return has negative effect on tax compliance and there were the problems of network issues affecting submission of tax liability documents when power interrupted. The theory of planned behavior explained why e-filing can be a means of generating revenue as a result of increasing in tax compliance rate in the state and this is based on personal attitude of users.

#### 5. Conclusion and Recommendations

The study provided an empirical analysis of the effect of electronic filing of tax returns on tax compliance behaviour in Kwara State. The result showed that electronic filing of tax return (proxied with adoption of tax filing system and attitude towards electronic tax filing system) enhanced tax compliance behaviour in Kwara State, evidenced from the significance of path coefficient table. The study concluded that the output of this analysis portrayed that adoption of electronic tax filing system has a positive significant effect on tax compliance behaviour. The second objective of the study sought to examine the effect of attitude towards electronic tax filing system on tax compliance behavior in Kwara State. The quantitative result shows a positive change on tax compliance. In conclusion, this change was also statistically significant; implying that attitude towards electronic tax filing system has a positive and significant effect on tax compliance behavior in Kwara State.

The study therefore recommends that KW-IRS should further scale up its electronic tax filing system thereby improving tax compliance rate. In additional, KW-IRS should continue to put more effort in ensuring a strong

and robust security system standby to protect taxpayers' confidential information transmitted over the internet against cybercrime.

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