INTEGRATED E-TAX FILING MANAGEMENT SYSTEM ON TAX COMPLIANCE BEHAVIOUR IN NIGERIA

Bojuwon Mustapha, Federal University Oye- Ekiti Nigeria
Olaleye Banji Rildwan, Federal University Oye- Ekiti Nigeria
Raji Sadiq, Fountain University, Osogbo. Osun State Nigeria
Lawal Adenike Moronke, Federal University Oye- Ekiti Nigeria
Herzallah Ahmad, Al-Quds University-Palestine
Tella Adeniran Rahmon, Osun State University, Nigeria

ABSTRACT

In the effort to improve the harmonization of Nigerian tax systems, the Federal Inland Revenue Service Board introduced an electronic tax filing system. Such an e-filing system eases tax registration for effectiveness and ensures accuracy and efficiency in revenue collection. This study examined the effect of integrated tax filing management system on tax compliance behavior by the income taxpayers focusing on those who have adopted the system in filing their tax return. From a target population of 5000 taxpayers who already use the e-filing system in Nigeria, a total of 400 respondents were randomly selected as representative of the focus of the present study. The data were collected using self-administered questionnaire and these were discussed through descriptive methods. The data were analyzed using SPSS statistical package, followed by the interpretation of results. 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.

Keywords: E-Tax Filing, Integrated Tax Automation System, Innovation Theory, Theory of Acceptance Model, Tax Payer Behaviour, Tax Fine and Penalities.

INTRODUCTION

Tax is defined as a compulsory levy, imposed by government or other tax raising bodies, on income, expenditure, or capital assets, for which the taxpayer receives nothing specific in return (Lymer & Oats, 2009). However, not all payments to government are considered as tax payments. For example, charges, tolls and other levies are paid to obtain a specific service and are not strictly tax payments.

An e-tax filing system is a computerized system that supports the registered taxpayers to electronically submit their income tax return to the Inland Revenue Service board through the application called Integrated Tax Identification System ITAS. The benefits of an E-tax filing system over submitting a manual tax filing returns to the income tax authorities are that the return are uploaded directly to the income tax authorities with minimal likelihoods of human mistakes (Fu et al., 2004). The application of e-tax filing returns is cost effective when compared to a manual tax filing returns because it saves both cost and time for the income tax authorities and the citizen (Klun, 2009).

Based on these, developing countries with an average quality information technology, in this regards have embraced the changing from the manual filing system to the adoption of the e-filing system (Wasao, 2014). This indicates that the use of the application in making payment is more convenient and effective thereby reducing the time spent on payment and

Citation Information: Mustapha, B., Rildwan, O.B., Sadiq, R., Moronke, L.A., Ahmad, H., Rahmon, T.A. (2021). Integrated e-tax filing management system on tax compliance behaviour in nigeria. *Academy of Accounting and Financial Studies Journal, 25*(S5), 1-15.

administrative cost of both the taxpayers and the tax authority.

In 2009, immediately after the financial crises, when there was a drastic fall in price of crude oil, the Federal Inland Revenue Service Board introduced a an e-filing system to increase the level of revenue generation and compliance for the modernization and harmonization of Nigerian tax offices. It was targeted at achieving a better transformation of the Inland Revenue Service Board from the manual filing system to the electronic filing system. Among the electronic programs introduced was the introduction of e-government which involves the automation of the e-tax system. An e- tax filing system was introduced in May 2009 known as Integrated Tax administration System (ITAS). With introduction of ITAS, FIRSB automated the introduction of unique tax identification numbers (UTPIN) through the electronic registration (e-registration) module. ITAS initially enabled registered taxpayers to file their tax returns for VAT (Value added Tax) and PAYE (Pay As You Earn) online but over the years, the system has been upgraded to cover the filing of individual income tax returns in Nigeria (Revenue & Customs, 2007).

The use of e- tax filing in most of the countries that have implemented it is not mandatory; rather it is offered as an option to taxpayers and the tax agency representative such as the tax agent. Existing studies identify that users of electronic tax filing system are resistant to the use of e-tax filing system in remitting their income tax to the tax authority (Bojuwon & Siti, 2014; Boonyarat et al., 2015; Sanz-Sanz et al., 2015). Although the e-tax filing system may have offered potential benefits in terms of improving tax administration compliance, it also reduces administrative cost, compliance cost and it is time saving, but the unwillingness to accept and use the system since it is not mandatory has led to some emerging issues from the users perspectives. Hence, the change from the manual tax filing system to the adoption of the e-tax filing system is not well accepted by all the taxpayers and the tax agent in some developing countries such as South Africa (Klun, 2009; Mararia, 2014).

However, the above mentioned challenges have motivated the development of this study, since there have been little empirical research on the effect of e-tax filing system on the level of taxpayers compliance to the use of the integrated system particularly in Nigeria. Therefore, in view of the direction of global movement of the tax authority towards the use of e-tax filing system, this research is out to find out how income taxpayers and practitioners in Nigeria as one of the growing economies in Africa respond to the e-tax filing system introduced by the FIRS. This research seeks to examine the effect of ITAS adoption on tax compliance by the income taxpayer, focusing on those who have adopted the ITAS system in filing their tax return.

LITERATURE REVIEW

The traditional tax filing system return has a lot of loopholes that an unscrupulous taxpayer could explore to give under-declared taxes which will have a negative effect on the government's revenue generation. The Integrated Tax Automation system (ITAS) which requires the taxpayers to register with the Federal Inland Revenue Service Board (FIRSB) in filing their tax returns at the speculated time of the year.

The main obligation of the ITAS is the application of internet to increase the level of revenue generation without having a physical contact with neither taxpayers nor tax payers having direct contact with the tax officers. In the traditional filing system, the taxpayers have to go to the FIRS office to manually find out the level of remittance of the taxpayers to the tax authority by the employer when the deduction has been made from their salary. On the part of the FIRS officers they can only determine who was remitting and who was not remitting through the application of random audit selection. The application of the ITAS has made it effectively possible for taxpayers to monitor their tax position from the comfort room

Citation Information: Mustapha, B., Rildwan, O.B., Sadiq, R., Moronke, L.A., Ahmad, H., Rahmon, T.A. (2021). Integrated e-tax filing management system on tax compliance behaviour in nigeria. *Academy of Accounting and Financial Studies Journal, 25*(S5), 1-15.

through Internet.

Theoretical Development

Diffusion of innovation theory

Diffusion Innovation Theory is employed in order to determine the factors affecting the usage of online tax system on self-employed taxpayers in Nigeria. This theory is reported to be a robust theory for conceptualizing adoption acceptance and implementation of innovation (Nassuora, 2012). The robustness of the theory is due to level of its compatibility with the result of a previous study by Weng & Lin (2011). The theory was developed by Rogers in 1983. Diffusion Innovation Theory is defined as the process by which an innovation is adopted and gain acceptance by users of certain community or population (Rogers & Coleman, 2003).

In the study, three major factors affecting diffusion innovation theory are examined namely: the way information about online tax system is communicated; the period in which the online tax system is communicated; and the time with nature of the system to which the online tax system was introduced. Welsh & Culler (2003) posit that users' perception of innovation characteristics is the major determinant of acceptance of innovation than the characteristic of experts. To Masrom & Hussein (2008) the importance of the Diffusion Innovation Theory can be explained in this study to provide the way any technology innovation moves from invention to widespread use. In a study conducted by Carter and Campbell (2011) on users' perception of information technology, the results reveal that almost all the characteristics postulated by Rogers' 1983 affect user's decision.

Furthermore, Ntemana & Olatokun (2012) explored the impact of the diffusion innovation characteristics on lecturers' opinions towards IT with 213 respondents from Lesotho University. Findings of the survey show that there were positive relationships between the five attributes; compatibility, relative advantage, complexity, tradability and observability with observability having the highest impact. Schaupp, Carter, & McBride (2010) examined trust and e-experience into a comprehensive view of e-filing adoption by administering a questionnaire to 260 graduate and undergraduate students using a regression analysis.

Theory of acceptance model

Developed by Davis et al. (2011), the Technology Acceptance Model (TAM) suggests two fundamental factors influencing an individual's acceptance of a new technology, namely; perceived ease of use (PEOU) and perceived usefulness (PU). PEOU is defined as the extent to which the user anticipates the target system to be effortless, while PU measures the users' subjective probability that applying a specific technology will increase their job performance (Fu et al., 2004). Derived from the Theory of Reasoned Action (TRA), TAM is an intention based model which is normally customized to meet the extensive needs of information technology research (Turner & Apelt, 2004). The key hypothesis of TAM is that the actual use of a new technology is a function of behavioral intentions, which also depend on users' attitudes (Seyal, et al., 2002).

A host of empirical studies has applied the TAM model, due to its parsimony and the multitude of experiential support for it (Bojuwon & Siti, 2014; Olaleye et al., 2020). For the specific studies on adoption of Internet based technologies, TAM has been proven to be a valuable, authoritative and robust model in describing the adoption criteria by the users (Horton, et al., 2001). Among the studies that have successfully applied TAM and found it to have almost accurate predictive power are but not limited to (Abu-dalbouh, 2013).

Citation Information: Mustapha, B., Rildwan, O.B., Sadiq, R., Moronke, L.A., Ahmad, H., Rahmon, T.A. (2021). Integrated e-tax filing management system on tax compliance behaviour in nigeria. *Academy of Accounting and Financial Studies Journal, 25*(S5), 1-15.

Davis (1989) defines perceived ease of use and perceived usefulness to be the degree to which the users believe that a particular innovation would enhance their performance. Additionally, Davis (1989) theorizes that perceived ease of use and perceived usefulness are attributing factors of technology characteristics. Albright & Park (2009) examined behavioral intention of university students to understand the use of e-learning in Malaysia with 268 university students from universities in Malaysia. The finding shows that perceived ease of use; perceived usefulness quality and efficiency were compatible with the term 'satisfaction'

Determinant of Tax Compliance by Self-Employed Taxpayers

Income tax compliance

Tax compliance is defined as the administrative rules of loading and paying tax effectively as at when due (Murphy, 2008). Tax compliance is also defined as the ability of persons to act of filing their tax return, declaring all the necessary taxable income accurately and disbursing all the payable taxes within the stipulated period of time without waiting for follow-up from the tax authority (Jackson & Milliron, 2002). The level of compliance has to do with reporting the actual amount of tax to be reminted with the requirement and the procedural rules and regulation guiding the tax administration system. This compliance has to do with the filing of tax return in time, reporting all the income and claiming the right amount of deductions are made at the right specific time.

However, the cost of complying with tax responsibility has showcased a pervasive interest among scholars, stakeholders and academician in recent years. Contemporary studies in the area of tax compliance was pioneered by examining the cost of complying with Value Added Tax (TAX) and other forms of tax in the United Kingdom between the 1970's and 80's (Sandford et al., 1989). The cost in-curred on administrative compliance is beside the occurrence of compliance cost that is borne by the taxpayers. This form of cost borne by the taxpayers must also be taken into consideration as a public cost to ensure that the rules and regulation are being obeyed. The compliance cost and the administrative cost borne by the taxpayers are so called operating cost of tax borne by the taxpayers (Tran-Nam, et al., 2000).

Tax knowledge and education

Tax knowledge is seen as one of the identified determining factors that influence individual taxpayers compliance behavior. Evidence from existing literature on issues relating to taxpayers compliance in paying their income tax revealed that the level of individual knowledge is one of the determining factors that influence compliance of individual taxpayers ability to understand the guiding principle, tax laws and the willingness to voluntarily comply to the payment of their tax as at when due. The understanding about the guiding principle of taxation, regulation and information pertaining to the opportunity to evade tax is related to the level of knowledge the taxpayers has, which is likely related to compliance with the tax (Rothengatter, 2008). Taxpayer's education is necessary in order to increase the level of awareness in relation to the guiding principle of taxation now that the world is moving towards the adoption of e-tax system in filing and payment of their tax (Boonyarat et al., 2015; Kariuki, 2013).

Furthermore, the taxpayer's attitude towards compliance can be improved through the enhancement of tax knowledge. It is postulated that when taxpayers have developed a positive interest towards tax, it will lead to reduction in his predisposition to evade tax payment (Franzoni, 1999). Income taxpayer's will readily accept a new innovation like an integrated online tax system when they previously have an ample knowledge to understand

Citation Information: Mustapha, B., Rildwan, O.B., Sadiq, R., Moronke, L.A., Ahmad, H., Rahmon, T.A. (2021). Integrated e-tax filing management system on tax compliance behaviour in nigeria. *Academy of Accounting and Financial Studies Journal, 25*(S5), 1-15.

the system. Thus the creation of awareness programme by the tax authority will enhance taxpayers ability to understand the e-tax filing system and it will increase their ability in fulfilling their civic responsibility in paying their tax returns (Bhatnagar, 2004; Stafford & Turan, 2011).

The higher the awareness and level of taxpayers education is directly linked to the likelihood of increase in voluntary compliance (Agbadi, 2011). Chau & Leung (2009) suggested that taxpayers with higher education level are more likely to have a higher level of moral level and higher level of attitudes towards compliance and thus may tend to comply more than taxpayers with low level of education on tax related matters. Thus, one of the ways to increase the level of income tax compliance is by convincing that taxpayers to have a minimum certain level of educational qualification and ability to exercise their tax obligations (Devos, 2012). In conclusion, the tax authority needs to lay emphasis on having an educational curriculum related to Nigerian tax system because of its impact on compliance to taxation

Perceived Opportunity for Tax Evasion

The users of e-tax system are often mentioned as a high-risk group in terms of compliance to tax system due to the chances they used in evading tax which is at the high side. The chances used by the taxpayer's service as opportunity which is often documented as one of the major factor that tends toward the non-compliance by the taxpayers (Walsh, 2012). The situations on the level of tax non-compliance, if the Nigerian income tax are not subjected to automated system or income tax are not deducted from the immediate source the chance of the taxpayers evading tax will be at the high side (DalhaHaruna, 2019).

According (Ibrahim & Pope, 2011); Mahat & Ling (2011) to income taxpayers were informed that the taxpayers are closely examined during the filing of their tax. It was concluded that the highly considerable group with the opportunity to evade tax include private business owner, and the small and medium enterprises which they also reacted that the use of the automated tax system has significantly increase due to the compliance cost and slow network connection.

In order to conclude, by given the chances to evade tax may lead to involuntary and non-complaint by the willingness to in failing to evade tax. To determine the actual effect of the automated system is very important to have a control for the compliance to the use of the innovation.

Fines and Penalties

The effect of fines and penalties are mostly substituted for one another because of their multiplicative relationship which is set at zero (Slemrod & Yitzhaki, 2002). Sandmo (2005) claimed that higher fines by the tax authority on the taxpayers simply makes compliance to take payment more hazardous for the taxpayers and should deter them from tax evasion. The deterrent effect of fine could not always be supported due to the fact that the observed effect of were weaker than the expected and some research are even suggested that an increase in penalties can have an undesirable effect on which may ,lead to tax avoidance (Paternoster, 1987).

In addition, Jackson & Milliron (2002) support the evidence that fines do affect tax compliance though the influence was fundamentally zero. The theoretical evidence introduced by Allingham & Sandmo (1972) has evidently shows that penalties, fines and audit probability have an influence on the level of taxpayers compliance. Therefore, the higher the penalties, fine and audit potential may lead to greater deterrence for tax evasion or

Citation Information: Mustapha, B., Rildwan, O.B., Sadiq, R., Moronke, L.A., Ahmad, H., Rahmon, T.A. (2021). Integrated e-tax filing management system on tax compliance behaviour in nigeria. *Academy of Accounting and Financial Studies Journal, 25*(S5), 1-15.

non-compliance.

Citizen centricity

Taxpayer's centricity is the functionality approach that is available on electronic filing to ensure that individual taxpayers have a full control on their tax affairs. The functionality of taxpayer's is based on whether the filing of return is submitted by the practitioner (Yang & Peterson, 2004). The taxpayer's centricity parameter tries to encompass the available information technology facilities that are been provided by the tax authority (Andrulis & Barton, 2016). This allows the taxpayers to effectively use the data base provided for the purpose of the filing of taxes and eventually lead to an increase in the revenue generation (tax compliance) by the government. At present the centricity of taxpayers is functionally available for income tax only (Debjani Bhattacharya, et al., 2012).

METHODOLOGY

The method used for the analysis is specifically highlighted in carrying out the paper with the attempt to address the research question. Our methodology gives a simple discussion on the population, sampling techniques, sampling frame, sampling size, data collection procedure and the method adapted in conducting the validity and reliability of the data. On the research design a descriptive survey design was employed for the study. A descriptive statistic design survey is the best for this paper.

Based on the opinion of Kumar (2019), the use of descriptive design is used to discover and measure the cause and effect of existing interaction between variable in a construct. This paper used a descriptive design because it allows researchers to collect a very high number of in-depth information from the population. The unit of analysis for the study is the income taxpayers who are using the ITAS in filing their taxes.

The respected target population is the income taxpayers operating in Nigeria. The population comprises of over 5000 registered taxpayers. With the above mentioned population the sample size comprised of 400 registered taxpayers. Ary et al. (2018) suggested that sample size should at least be up to 30% of the population. The paper employed primary data in collecting the information from the income taxpayers through the use of questionnaire. Hence, this paper introduces the method of analysis highlighting the demographic profile of the respondents, sample size and survey items adopted. A total of 350 copies of a questionnaire were administered to the registered income taxpayers out of which only 320 were returned and 310 were usable. The total of 10 was discarded as a result of error of not completing the question and ticking more than one column on a single question. A purposive sampling method was employed in the paper to gain insight into information from a precise target group of the respondent.

In addition, the instrument used comprises 33 items which is related to the five identified factors adopted and modified from existing studies (Debjani Bhattacharya et al., 2012; Ibrahim & Pope, 2011). The factors are divided into six categories including the demographic variable, Income tax compliance, Tax knowledge and education, Fines and penalties, perceived opportunity of tax evasion and Citizen Centricity. The measurement are developed using 5-point Likert Scale ranging from (1= strongly disagree) to (5= strongly agree) to achieve the reliability score values of the instruments.

Data validity and reliability

Citation Information: Mustapha, B., Rildwan, O.B., Sadiq, R., Moronke, L.A., Ahmad, H., Rahmon, T.A. (2021). Integrated e-tax filing management system on tax compliance behaviour in nigeria. *Academy of Accounting and Financial Studies Journal, 25*(S5), 1-15.

Validity of any research is the degree to which the items measures it identified construct .hence, the term validity refers to the highest level at which an instrument accurately measure what it intend to measure (Ibrahim & Pope, 2011). The content validity of this paper instrument was determined through piloting where the replies of the subject were checked alongside the objectives of the paper. The research items where considered valid to the content selected and included in the questionnaire which is relevant with the identified variables. The reliability of the instrument used consistently measured the data after several repeated trail on the data using a test –retest technique in Table 1.

Table 1
OPERATIONALIZATION OF THE IDENTIFIED VARIABLES

Objectives	Variables	Indicators	Tools of analysis
To estimate tax compliances levels by income taxpayer in Nigeria	Dependent	Timely filing of tax returns and payment of taxes	Frequencies/Descriptive statistics/ Regression OLS
To Determine the effect of Tax knowledge and education on tax compliance	independent	Awareness of tax obligations and compliance requirements	Frequencies/Descriptive statistics/ Regression OLS
To determine the effect of perceived opportunity and evasion on tax compliance	independent	Opportunities for tax Evasion	Frequencies/Descriptive statistics/ Regression OLS
To assess the effect of fines and penalties on tax compliance	independent	Extent of penalties and enforcement efforts	Frequencies/Descriptive statistics/Regression OLS
To evaluate the effect of Citizen Centricity on tax compliance	independent	Full control, availability of information to used data	Frequencies/Descriptive statistics/Regression OLS

Analytical Model

A multiple linear regression analysis model was developed to predict the level of tax compliance behavior using four independent variables in this paper. These variables include Income tax compliance, Tax knowledge and education, Fines and penalties, perceived opportunity of tax evasion and Citizen Centricity. The ß coefficients for each independent variable generated from the model and subjected to a z –test, in order to test each of the hypotheses. The regression model used to test is shown below:

$$TCB=\alpha+\beta 1tke+\beta 2poe+\beta 3frp+\beta 4ctc+\varepsilon.$$

Where
α = Constant
β = Coefficient of each independent variable
tke = Tax knowledge & education
poe = Perceived opportunity & evasion
frp = Fairness & Penalties
ctc = Citizen centricity

Data analysis

This part of the paper gives the details about the demographic information of the 310 usable collected data majority of them were male males with N= 215 (65.4%) and females were N=95 (31.6%). The respondents age bracket has the majority ranging from 31-40 years old with N=158(50.9%), age bracket ranged from 41-50 years old were N= 71 (22.9%) , N=26 (8.4%) were within the age bracket of 18-30 years old and respondents age above 50

Citation Information: Mustapha, B., Rildwan, O.B., Sadiq, R., Moronke, L.A., Ahmad, H., Rahmon, T.A. (2021). Integrated e-tax filing management system on tax compliance behaviour in nigeria. *Academy of Accounting and Financial Studies Journal, 25*(S5), 1-15.

years were N= 55 (17.7%). The respondents' educational background N= background N=170 representing 38.5% were graduate, N=70 (29.6 %) were diploma, followed by the respondents with school certificates N= 40 (24.6%) and the least number of respondents were postgraduate with N= 30 (7.3%). Figure 1 details a graphical presentation of the demographic profile of the study respondents.

With the information received on the affirmed annual turnover, between N 100,000 to 500,000 was 190 (61.3%) whereas turnover between 501,000 to 1,000,000 was 78 (25.2%). In addition, the annual turnover between N 1,100,000 to N 1,500,000 was 22 (7.1%).The annual turnover above N1,501,000 was 18 (5.8%). The finding shows that most of the small and medium enterprises in Nigeria have their annual turnover bellow N 5,000,000 was 2 (0.6%).

To determine whether the business is registered with the tax authority, the researcher asked the respondents if they have acquired the unique Tax Identification Number (TIN) which is now mandatory for all business. The result indicates that 233 (75.2%) of the respondents have unique tax identification number while only 77 (24.8%) are without the number. The reason for the 24.8% is that they have not fully registered their businesses with the tax authority and still use manual tax returns or go through tax agents in Table 2.

Table 2
DEMOGRAPHIC PROFILE OF THE RESPONDENTS

	Description	Frequency	Percent
Gender	Male	215	69.4
	Female	95	30.6
	Total	310	100
Age bracket			
	18 t0 30 years	158	65.4
	31 to 40 years	71	22.9
	41 to 50 years	55	17.7
	51 year and above	26	8.4
	Total	310	100
Qualification			
	Undergraduate	170	54.8
	Diploma	70	22.6
	Certificate	40	12.9
	Postgraduate	30	9.7
	Total	310	100
Annual Turnover			
	Between N100,000-N500,000	190	61.3
	Between N501,000-N1,000,000	78	25.2
	Between N1,001,000-N1,500,000	22	7.1
	Between N1,501,000-N2,000,000	18	5.8
	Over 2,000,000	2	0.6
	Total	310	100
Identification No			
	Respondents with Number	233	75.2
	Respondents without number	77	24.8
	Total	310	100

Tax Compliance Behaviour

The results in Table 3 show that, on the average, taxpayers file their Income Tax ,VAT ,PAYE and Withholding Tax returns as and when due, with the mean value of 3.0862, 3.1823, 3.1438, 3.3746, and standard deviation of .74620, .82964, .85761, .67088 respectively. They also pay the right amount of taxes within the time frame with mean and

Citation Information: Mustapha, B., Rildwan, O.B., Sadiq, R., Moronke, L.A., Ahmad, H., Rahmon, T.A. (2021). Integrated e-tax filing management system on tax compliance behaviour in nigeria. *Academy of Accounting and Financial Studies Journal, 25*(S5), 1-15.

standard deviation value of 3.2015, 3.1113 and .74798, .70435 and .80436. Generally, tax compliance behaviour level was with the mean and standard deviation value of 3.2077 and .73450.

Table 3
TAX COMPLIANCE

		mean	Std .Deviation	Skewness	Kurtosis
1	The stress of filing tax is unbearable	3.0862	.74620	-.290	-.873
2	I file all my income tax on time	3.1823	.82964	-.401	-.759
3	I file all my VAT returns on time	3.1438	.85761	-.777	-.297
4	I deduct PAYE and remit the amount on time	3.3746	.67088	-.698	-.840
5	I deduct withholding tax on professional fees and remit on time	3.2015	.74798	-.327	-.485
6	I Pay all my takes within the required time frame	3.1113	.70435	-.487	-.823
	Total level of Tax compliance	3.2067	.73450	-.412	.-594

Tax knowledge

Tax knowledge and education level was asked from the respondents in Table 4. The results reveal that respondents are not confident on how to affirm actual income received from all sources to the tax authority with the mean and standard deviation value of 2.74500 and 1.28853. Also, respondents are not convinced on how to keep records concerning income and expenditure for a period of three years after submission of the tax return with the mean and standard deviation value of 2.74500 and 1.28853. They seem not to comprehend that they should pay tax due within the agreed period from the date of issue of the notice of assessment and stipulated period with the mean and standard deviation value of 2.8323 and 1.57675. Additional, respondents seem not to know which income should be included or excluded in defining the taxable income with the mean and standard deviation value of 3.0265- and 1.21300. Generally result on tax knowledge and educations were with the mean and standard deviation value of 2.7165- and 1.28667.

Table 4
TAX KNOWLEDGE

		mean	Std .Deviation	Skewness	Kurtosis
1	I know how to declare actual income received from all sources to the tax authority	2.74500	1.28853	.333	1.374
2	I know how to keep records/documents pertaining to income and expenditure for a period of the notice of assessment or within the stipulated time	2.50154	1.32012	.386	1.374
3	I understand that I should pay taxes due within the prescribed period from the date of issue of the notice of assessment or within the stipulated period	2.8323	1.57675	-.132	-1.767
4	I know which income should be included or excluded in determining the taxable income	3.0265-	1.21300	.143	1.487
	Total level of tax knowledge and evasion	2.7165-	1.28667	.213	1.505

Fines and Penalties

Result on Fines and Penalties indicate, in Table 5, that the enforcement is not very resilient with the mean and standard deviation value of 3.1114 and1.31886. Also the respondents were not positively convinced on whether the penalty is lower than their tax saving due to not complying with tax laws with the mean and standard deviation value of 3.2076 and 1.42801. Finally, respondents seemed uncertain on whether serious prosecution and penalty by the tax authority are given for not comply with the mean and standard deviation value of 3.0537 and1.47659. Generally results on tax fines and penalties was with the mean and standard deviation value of 3.1243 and

Citation Information: Mustapha, B., Rildwan, O.B., Sadiq, R., Moronke, L.A., Ahmad, H., Rahmon, T.A. (2021). Integrated e-tax filing management system on tax compliance behaviour in nigeria. *Academy of Accounting and Financial Studies Journal, 25*(S5), 1-15.

1.38003.

Table 5
FINES AND PENALTIES

		mean	Std .Deviation	Skewness	Kurtosis
1	The penalty rates are very low and I can afford to pay the penalty	3.1114	1.31886	.038	1.352
2	The enforcement is very weak	3.2076	1.42801	-.237	-1.442
3	Serious enforcement and penalty by the FIRS my result if I do not comply	3.0537	1.47659	-.264	-1.396
	Total level of Fines and Penalties	3.1243	1.38003	-.129	-1.439

Perceived Opportunity for Tax Evasion

Regarding results on Perceived opportunity for tax evasion in Table 6, respondents are of the opinion that since supporting documents do not need to be sent to the tax authority, they can manipulate the figure in the tax return with the mean and standard deviation value of 3.1692 and .764217. Respondents were not certain if the tax authority can detect when they did not report exact income, and also believed that they will escape without any punishment with the mean and standard deviation value of 2.6017and 1.46078. They are uncertain whether the tax authority has limited capability to investigate all income reported to them so they have an opportunity not to report their exact income with the mean and standard deviation value of 2.5302 and 1.46998. In general, findings on perceived opportunity for tax evasion was found to be with the mean and standard deviation value of 3.1262 and1.34507.

Table 6
PERCEIVED OPPORTUNITY FOR TAX EVASION

		Mean	Std .Deviation	Skewness	Kurtosis
1	Since the supporting documents do not need to be sent to the FIRS, it can be easily manipulate	3.1692	.764217	-.917	-.202
2	If detected not reporting my exact income, I will escape without punishment	2.6017	1.46078	.187	1.683
3	I believe the tax authorities have limited capability of detecting tax evasion.	2.5302	1.46998	.183	1.730
	Total level of perceived opportunity and evasion	3.1262	1.34507	.033	1.720

Citizen Centricity

Findings on citizen centricity shows that respondents' functionality approach is satisfactory on income tax compliance with the mean score of=2.5305). This confirms that the respondents agreed with the functionality approach used by the tax authority. In addition, respondents believe the functionality approach is fair for them to take control with the mean value mean of 2.4121. Similarly, the taxpayers having control of the affair of filling their return with the mean value of 3.6923. Generally, the citizen centricity and functional approach is fair with the mean value of 2.0162.

Table 7
CITIZEN CENTRICITY

		Mean	Std.Deviation	Skewness	*Kurrtosis*
1	The functionality approach by the tax authority is encouraging	2.5305	1.31014	.004	-1.322
2	The functionality approach is fair for them to take control	2.4121	1.24211	.013	-1.221

Citation Information: Mustapha, B., Rildwan, O.B., Sadiq, R., Moronke, L.A., Ahmad, H., Rahmon, T.A. (2021). Integrated e-tax filing management system on tax compliance behaviour in nigeria. *Academy of Accounting and Financial Studies Journal, 25*(S5), 1-15.

3	Is the citizen having control of the affair of filling their return	2.3212	1.12234	.121	-.315
4	Total level of citizen centricity	2.0162	1.24230	-.151	-1.321

Regression

It is indicated that a multiple regression analysis is used to predict the level of tax compliance behaviour of the respondent. The likelihood of the analysis was carried out on the four identified component factor which include Tax knowledge and education, Fines and penalties, perceived opportunity of tax evasion and Citizen Centricity. In addition the coefficient value of each independent variable was subjected to t-test in identifying the hypothesized model. The model Summary and the Anova was the effect sizes and regression model as presented in table 7, 8 and 9. The results shows that the significant model correlation coefficient was .956 which indicated the model predicted over 95% of the change in the independent variable. There was a significant relationship between the variables by considering the coefficient value of 0.935. The model below indicates an adequate value in the case as indicated by Durbin-Watson statistic value of 1.012 which is in the range between 1 to 2 in Table 8.

Table 8
MODEL SUMMARY

R	R Square	Adjusted r square	Std. Error of the Estimate	Durbin-watson
.956	.935	.953	.16053	1.012

a. Predictors: (Constant), Tax knowledge and education, Fines and penalties, perceived opportunity of tax evasion and Citizen Centricity

b. Dependent Variable: Tax compliance behaviour

Source: (Survey Data, 2020)

The ANOVA model in Table 9 indicated the regression model is adequate with an effective size of the regression value showing over 201 contributed by the residual mean sum of squares. The F-ratio was 201.210 at 3 degrees of freedom which are the four factors. This represented the regression model and was statistically significant with a p-value of 0.000.

Table 9
ANOVA MODEL

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	33.997	5	6.799	201.210	.000
Residual	1.520	46	0 .033		
Total	35.517	51			

a. Dependent Variable: Tax compliance behaviour

b. Predictors: (Constant), Tax knowledge and education, Fines and penalties, perceived opportunity of tax evasion and Citizen Centricity.

Source: (Survey Data, 2020)

Coefficients Model Report

The regression outcome in Table 10 indicate the parameters indicator predicted the relationship to the identified independent variables with significant, ß1= 0.151 (p-value = 0.000 which is less than a = 0.05) which implies the rejection of the null hypothesis stating that there is no significant relationship between Tax Knowledge and Education and tax compliance behaviour. This indicates that for every units increase in the effect of Tax Knowledge and Education, there is

Citation Information: Mustapha, B., Rildwan, O.B., Sadiq, R., Moronke, L.A., Ahmad, H., Rahmon, T.A. (2021). Integrated e-tax filing management system on tax compliance behaviour in nigeria. *Academy of Accounting and Financial Studies Journal, 25*(S5), 1-15.

0.223 units increase in tax compliance behaviour. The table shows that ß2 = 0.851(p-value = 0.000 which is less than a = 0.05) which implies that we reject the null hypothesis stating that there is no significant relationship between tax fines and penalties and tax compliance.

This further indicates that for each unit increase in tax fines and penalties, there is up to 0.851 units increase in tax compliance behaviour. The findings also showed that ß3 was 0.421 (p-value = 0.000 which is less than a =0.05) which implies that we accept the null hypothesis that states that there is no significant relationship between perceived opportunity for tax evasion and tax compliance behaviour. The table also shows that ß4 = -0.553 (p-value = 0.001 which is more than a = 0.05) which indicates that we accept the null hypothesis stating that there is no significant relationship between Citizen Centricity and tax compliance behaviour.

Table 10
COEFFICIENTS MODEL

	Unstandardized coefficients		**Standardized coefficients**		
	B	**Std, Error**	**Beta**	**t**	**Sig.**
(Constant)	2.528	.971		-2.603	.012
Tax Knowledge and Education	.151	.109	.223	1.377	.000
Tax fines and Penalties	524	.132	.851	3.125	.000
Perceived opportunity for tax evasion	1.200	.262	.421	4.960	.000
Citizen Centricity	-.419	.124	-.553	-3.388	.001

Source: (Survey Data, 2020)

Dependent Variable: Tax compliance

Summary and Interpretation of the findings

The results on gender showed that there are more male than females among the respondents revealing that more men than female are Medium and Small investors. It was also indicated that Majority of the respondents were between the ages brackets of 30-50 years. It was also brought to light that majority of respondents were fairly educated. Those with an undergraduate degree contributing the highest percentage followed by those with School certificates affirming that there were moderate level of literacy among the respondents

Findings on information about Turnover affirmed that majority of income taxpayers have a turnover below 500 thousand. Findings on Personal identification numbers revealed that most income taxpayers have got personal Identification numbers which were generated online. The study found that compliance behaviour among income taxpayer is Moderate. There is therefore a need for tax authorities and the government to come up with strategies to effectively monitor this category of taxpayers with a view of enhancing tax compliance. An analysis of the effect of tax knowledge and education on tax compliance behaviour revealed a strong positive correlation meaning that tax knowledge and education has a significant effect on tax compliance behaviour. As Hijattulah & Pope (2008) argue, compliance behaviour includes knowledge that are incurred by taxpayers, but are beyond the control of its management. Hence tax knowledge and education is likely to affect tax compliance behaviour sector.

An assessment of the effect of fines and penalties on tax compliance behaviour revealed that there is a significant positive relationship between them. This implies that an effective use and enforcement of fines and penalties on tax offenders will enhance levels of tax compliance. This in agreement with studies by Friedland et al. (1978) that compliance was strongly affected by the amount of fines than by audit probabilities. Studies by Allingham & Sandmo (1972) indicate that penalties as well as audit probability have an effect on tax compliance, thus the higher the penalty and the potential audit probability the greater discouragement for potential tax evasion. The study having evaluated the effect of perceived opportunity for tax evasion on tax compliance level concluded that there is a no relationship between the two implying that a perceived opportunity for

Citation Information: Mustapha, B., Rildwan, O.B., Sadiq, R., Moronke, L.A., Ahmad, H., Rahmon, T.A. (2021). Integrated e-tax filing management system on tax compliance behaviour in nigeria. *Academy of Accounting and Financial Studies Journal, 25*(S5), 1-15.

tax evasion will not affect levels of tax compliance.

The study also examined the effect of citizen centricity on tax compliance behaviour. The findings show there is a negative correlation relationship between the two. A study by Mohd (2010) asserts that tax knowledge is necessary to increase public awareness on taxation rules and the role of taxation in national development. Once citizen centricity pertaining the importance of taxation, they will be influenced to comply without any enforcements or pressure on them. In addition attitude towards taxation can also be improved through taxation knowledge, thus when a taxpayer has a positive attitude toward tax, this may influence him or her to comply (Eriksen& Fallan, 1996).

CONCLUSION, RECOMMENDATIONS AND SUGGESTION FOR FUTURE RESEARCH

These findings provide direct evidence that tax knowledge and education is a contributory factor in tax compliance behaviour, and an indication of its effect. From the findings, there is enough proof to conclude that tax knowledge and education is associated with tax compliance behaviour. The study provides evidence that Tax knowledge and education, Fines and penalties, perceived opportunity of tax evasion and Citizen Centricity are contributory factors in tax compliance behaviour. Specifically, for a tax system with fair tax rates of fines and penalties, tax compliance is likely to improve. Finally, the study results also concluded that perceived opportunity for tax evasion have no effect on tax compliance behaviour. To enhance tax compliance behaviour governments should enhance E filing systems such as ITMS, increase tax compliance behaviour and enhance tax fines and penalties as well as tax knowledge and education.

The study also finds strong sustenance for the argument that fines and penalties impact highly on tax compliance. Thus there should be reasonable levels of fines and taxes to employ. This way, taxpayers will be reinvigorated to observe since they will keep accurate records for taxation determinations in order to avoid fines and penalties.

In future, researchers should replicate this study to cover the corporate organisation. A study on the self-assessment system can also be carried out to determine its effectiveness on enhancing tax compliance behaviour. Further the study should also put into consideration the influence of Economic conditions and financial condition on tax compliance behaviour. Further, the study can be repeated in the future to assess the changes that might have occurred as a result of the dynamic nature of information and communication technology.

REFERENCES

Abu-Dalbouh, H.M. (2013). A questionnaire approach based on the technology acceptance model for mobile tracking on patient progress applications. *J. Comput. Sci.*, *9*(6), 763-770.

Agbadi, S.B. (2011). *Determinants of tax compliance: A case study of VAT flat rate scheme traders in the Accra metropolis* (Doctoral dissertation).

Allingham, M.G., & Sandmo, A. (1972). Income tax evasion: A theoretical analysis. *Taxation: critical perspectives on the world economy*, *3*, 323-338.

Andrulis, J., & Barton, B. Revenue and fiscal management: Tomorrow's government at work.

Ary, D., Jacobs, L.C., Irvine, C.K. S., & Walker, D. (2018). *Introduction to research in education*. Cengage Learning.

Bhatnagar, S. (2004). *E-government: From vision to implementation-A practical guide with case studies*. Sage.

Mustapha, B., & Sheikh, S.N.B. (2014). The influence of technology characteristics towards an online tax system usage: the case of nigerian self-employed taxpayer. *International Journal of Computer Applications*, *105*(14).

Sofian, S. (2014). The Antecedents of Taxpayers Compliance Behavior and the Effectiveness of Thai Local Government Levied Tax. *IBT Journal of Business Studies (JBS)*, *1*(1).

Citation Information: Mustapha, B., Rildwan, O.B., Sadiq, R., Moronke, L.A., Ahmad, H., Rahmon, T.A. (2021). Integrated e-tax filing management system on tax compliance behaviour in nigeria. *Academy of Accounting and Financial Studies Journal, 25*(S5), 1-15.

Carter, L., & Campbell, R. (2011). The impact of trust and relative advantage on internet voting diffusion. *Journal of Theoretical and Applied Electronic Commerce Research*, *6*(3), 28-42.

Chau, K.K.G., & Leung, P. (2009). A critical review of Fischer tax compliance model: A research synthesis.

DalhaHaruna, A. (2019). Impact Of Revenue Generation On Economic Development (Doctoral Dissertation.

Davis, F.D., Bagozzi, R.P., & Warshaw, P.R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, *35*(8), 982-1003.

Bhattacharya, D., Gulla, U., & Gupta, M.P. (2012). E- service quality model for Indian government portals: citizens' perspective. *Journal of Enterprise Information Management*.

Devos, K. (2012). A comparative study of compliant and non-compliant individual taxpayers in Australia. *Journal of Business and Policy Research*, *7*(2), 180-196.

Franzoni, L.A. (1998). Tax evasion and tax compliance. *Available at SSRN 137430*.

Fu, J.R., Chao, W.P., & Farn, C.K. (2004). Determinants of taxpayers' adoption of electronic filing methods in Taiwan: An exploratory study. *Journal of Government Information*, *30*(5-6), 658-683.

Horton, R.P., Buck, T., Waterson, P.E., & Clegg, C.W. (2001). Explaining intranet use with the technology acceptance model. *Journal of Information Technology*, *16*(4), 237-249.

Ibrahim, I., & Pope, J. (2011). The viability of a pre-filled income tax return system for Malaysia. *Journal of Contemporary Issues in Business and Government, The*, *17*(2), 85-101.

Jackson, B.R., & Milliron, V.C. (2002). Tax compliance research. *Taxation: Critical perspectives on the world Economy*, *3*, 56.

Kariuki, E. (2013). Building blocks of a modern African tax administration. *Africa Policy Research Institute Limited Publication*, *5*.

Klun, M. (2009). Pre-filled income tax returns: Reducing compliance costs for personal income taxpayers in Slovenia. *Financial Theory and Practice*, *33*(2), 219-233.

Kumar, R. (2018). *Research methodology: A step-by-step guide for beginners*. Sage.

Mahat, M.A., & Ling, L.M. (2011). Featuring Tax Education in Non-accounting Curriculum: Survey Evidence.

Mararia, A.K. (2014). *The effect of integrated tax management system on tax compliance by small and medium sized enterprises in Nairobi central business district* (Doctoral dissertation, University of Nairobi).

Masrom, M., & Hussein, R. (2008). *User acceptance of Information Technology: Understanding theories and models*. Venton Pub.

Murphy, K. (2008). Enforcing tax compliance: to punish or persuade?. *Economic analysis and policy*, *38*(1), 113-135.

Nassuora, A.B. (2012). Students acceptance of mobile learning for higher education in Saudi Arabia. *American Academic & Scholarly Research Journal*, *4*(2), 24-30.

Ntemana, T.J., & Olatokun, W. (2012). Analyzing the influence of diffusion of innovation attributes on lecturers' attitude towards information and communication technologies. *Human Technology: An Interdisciplinary Journal on Humans in ICT Environments*.

Olaleye, B.R., Olabode, A., Daramola, K.O., Oshatimi, O.O., Lawal, A.M. & Oladele, T.O. (2020). Analysis of the influence of interest rate on money supply and investment in Nigeria: A Vector Error Correction Model (VECM) Approach. *KIU Interdisciplinary Journal of Humanities and Social Sciences*, *1(3),* 204-221

Paternoster, R. (1987). The deterrent effect of the perceived certainty and severity of punishment: A review of the evidence and issues. *Justice Quarterly*, *4*(2), 173-217.

Revenue, H., & Customs. (2007). Departmental report 2007 HM Revenue & Customs (Vol. 7107): The Stationery Office

Rogers, J.C., & Coleman, J.S. (2003). Interactions between the Atlantic Multidecadal Oscillation, El Nino/La Nina, and the PNA in winter Mississippi valley stream flow. *Geophysical Research Letters*, *30*(10).

Rothengatter, M.R. (2008). *'Taxing taxis'-limits and possibilities for regulating tax compliance behaviours of taxi-drivers: an Australian case study* (Doctoral dissertation, Southern Cross University).

Sandford, C., Godwin, M., & Hardwick, P.J. (1989). *Administrative and compliance costs of taxation*. fiscal.

Sandmo, A. (2005). The theory of tax evasion: A retrospective view. *National tax journal*, *58*(4), 643-663.

Sanz-Sanz, J.F., Arrazola-Vacas, M., Rueda-López, N., & Romero-Jordán, D. (2015). Reported gross income and marginal tax rates: estimation of the behavioural reactions of Spanish taxpayers. *Applied Economics*, *47*(5), 466-484.

Schaupp, L.C., Carter, L., & McBride, M.E. (2010). E-file adoption: A study of US taxpayers' intentions. *Computers in Human Behavior*, *26*(4), 636-644.

Seyal, A.H., Rahman, M.N.A., & Rahim, M.M. (2002). Determinants of academic use of the Internet: a structural equation model. *Behaviour & Information Technology*, *21*(1), 71-86.

Slemrod, J., & Yitzhaki, S. (2002). Tax avoidance, evasion, and administration. In *Handbook of public economics* (Vol. 3, pp. 1423-1470). Elsevier.

Citation Information: Mustapha, B., Rildwan, O.B., Sadiq, R., Moronke, L.A., Ahmad, H., Rahmon, T.A. (2021). Integrated e-tax filing management system on tax compliance behaviour in nigeria. *Academy of Accounting and Financial Studies Journal, 25*(S5), 1-15.

Stafford, T.F., & Turan, A.H. (2011). Online tax payment systems as an emergent aspect of governmental transformation. *European Journal of Information Systems*, *20*(3), 343-357.

Tran-Nam, B., Evans, C., Walpole, M., & Ritchie, K. (2000). Tax compliance costs: Research methodology and empirical evidence from Australia. *National Tax Journal*, *53*(2), 229-252.

Turner, L., & Apelt, C. (2004). Globalisation, Innovation and Information Sharing in Tax Systems: The Australian experience of the diffusion and adoption of electronic lodgement. *eJTR*, *2*, 241.

Walsh, K. (2012). Understanding taxpayer behaviour–new opportunities for tax administration. *The Economic and Social Review*, *43*(3, Autumn), 451-475.

Wasao, D. (2014). *The effect of online tax system on tax compliance among small taxpayers in east of Nairobi tax district* (Doctoral dissertation, University of Nairobi).

Welsh, M., & Culler, D.E. (2003, March). Adaptive Overload Control for Busy Internet Servers. In *USENIX Symposium on Internet Technologies and Systems* (pp. 4-4).

Weng, M.H., & Lin, C.Y. (2011). Determinants of green innovation adoption for small and medium-size enterprises (SMES). *African journal of business management*, *5*(22), 9154-9163.

Yang, Z., Jun, M., & Peterson, R.T. (2004). Measuring customer perceived online service quality: scale development and managerial implications. *International Journal of operations & production Management*.

Citation Information: Mustapha, B., Rildwan, O.B., Sadiq, R., Moronke, L.A., Ahmad, H., Rahmon, T.A. (2021). Integrated e-tax filing management system on tax compliance behaviour in nigeria. *Academy of Accounting and Financial Studies Journal, 25*(S5), 1-15.