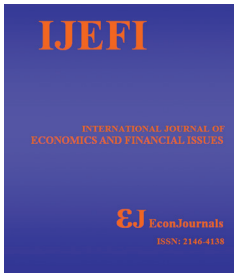

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Electronic Tax Filing System and Compliance among Small and Medium-Sized Enterprises in Lagos State, Nigeria

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ABSTRACT

The study examined the effect of the adoption of an e-tax filing system on SMEs compliance. This was with a view to providing information on the compliance of SMEs with electronic tax filing systems in Lagos State. The study employed a descriptive survey research design, targeting a population of 91,097 SMEs. Taro Yamane's formula was used to obtain a sample of 398 SMEs. Data were collected through well-structured questionnaires and analyzed using ordinal logit regression techniques. The study showed that factors such as performance expectancy, effort expectancy, and e-tax filing awareness have a positive significant influence on SMEs compliance in Lagos State. The study concluded that the electronic tax filing system positively impacted tax compliance of SMEs in Lagos State. The study recommended that tax authorities should enhance the performance and effort expectancy of the e-tax filing system in Lagos State by addressing technical issues, streamlining the filing process, and improving user interface design.

Keywords: Electronic Tax Filing System, SMEs, Compliance
JEL Classifications: H21, H25

1. INTRODUCTION

The evolution of e-tax filing systems has been a global phenomenon, marked by a shift from traditional, paper-based methods to technologically advanced systems. Developed countries have taken the lead in implementing ETFS, proving its benefits of increased efficiency, reduced paperwork, improved accuracy and compliance (Olaoye and Atilola, 2018; Soneka and Phiri, 2019; Mukuwa and Phiri, 2020; Zakari, 2021). In alignment with global trends, Nigeria has also incorporated advanced technology into its tax administration to modernize and streamline its tax procedures with the goals of enhancing compliance, increasing tax revenue, as well as increasing GDP ratio (Bird and Zolt, 2008; Olaoye and Atilola, 2018). However, the success of this transition heavily relies on the active participation and seamless integration of SMEs, which form the backbone of the nation's economic activity and most of which operate in the informal sector.

SMEs play an important role in the economic growth of Lagos State, Nigeria's commercial hub. These enterprises contribute to job creation, innovation, and economic diversification (National Bureau of Statistics, 2019; PWC Nigeria, 2020). However, despite their economic significance, SMEs are often face with challenges related to tax compliance, stemming from factors such as limited resources, administrative complexities, and inadequate awareness of tax laws, impacting revenue generation and hindering government's ability to provide essential services. In response, the introduction of e-tax filing system holds promise for enhancing tax compliance and streamlining tax filing processes among SMEs (Lumumba et al., 2010).

The extent of ETFS adoption in Lagos State remains a pertinent question because adoption varies among different segments of taxpayers, while some businesses have embraced ETFS, others continue to rely on traditional methods (Ajape and Uthman, 2017; Daniel and Esther, 2019). Understanding this adoption

level is crucial to offers an indication of the level of trust and confidence among taxpayers in utilizing electronic platforms for tax compliance and also sheds light on potential barriers or challenges hindering its uptake, thereby informing policymakers and stakeholders on areas needing improvement or intervention. Despite the substantial benefits accompanying this development, its adoption level in Nigeria is considerably below expectations (Abdul Aziz and Idris, 2014; Kumar and Gupta, 2017).

According to OECD (2018), the tax-to-GDP ratio is the cornerstone of any analysis of tax level in an economy and the average tax-to-GDP ratio in OECD nations is projected at 33.5 % for 2021 (OECD, 2022). Nigeria's tax-to-GDP ratio according to FIRS, was 10.86% in 2021, which is considerably lower than the OECD threshold for Africa and that of South Africa (25.2%) or undeveloped countries in the globe. The consequence of low acceptance is evidenced in Nigeria with limited taxpayers using ETFS and others, resulting in paper-based methods of tax report, which may result in the overall decline in compliance levels (Akpubi and Igbekoyi, 2019; Aliyu and Sadiq, 2020). It is not certain how the adoption of e-tax filing system affects the compliance of the SMEs in Lagos State.

Elements affecting the usage of ETFS differ between nations owing to the peculiarities of their economy, implementation method and other factors (Zakari et al., 2019; Etim et al., 2020; Chisala, 2022). Considering Nigerians' tendency to make rational decisions after weighing the consequences, factors such as performance expectancy (PE), effort expectancy (EE), and facility conditions are significant variables in understanding ETFS adoption among SMEs. PE reflects the extent to which SMEs believe e-tax filing will enhance their tax filing performance, while EE pertains to the perception that using the ETFS will be effortless. Facility conditions refer to the availability of resources necessary for utilizing the e-tax filing system. Additionally, individual decisions are influenced by social factors such as family and friends, making Social Influence another important determinant of ETFS adoption. Trust in the system, which can be impacted by concerns about internet fraud and scam, as well as inefficient network infrastructure, is another major factor influencing ETFS adoption. Awareness about the system also plays a considerable role in influencing adoption among SMEs.

The study examined the effect of the adoption of electronic tax filing system on SMEs compliance in Lagos State, Nigeria. The rest of the paper is structured as follows. Section two details literature review and theoretical framework. Section three discusses the data and research methods adopted to achieve the research objective. Section four presents result and discussion of findings, while section five concludes and make recommendations based on the research findings.

2. LITERATURE REVIEW

2.1. Conceptual Review

2.1.1. Electronic tax filing system

Electronic tax filing system is a digital platform allowing individuals and businesses to file taxes electronically rather than manually (Wasao, 2014; Swamy and Shivakumara 2022; Akpubi and Igbekoyi, 2019; Adebayo and Idowu, 2020). Compared to the traditional method, ETFS enables a more secure, efficient and convenient tax submission experience for individuals and companies. The platform is provided by the tax authority and accessible through their website, taxpayers can access the platform by registering and allocating an online account, which usually requires providing personal information and creating a secure password (Chaerunnisa, 2018). Upon filing tax returns, the system automatically sends an acknowledgement of receipt and payment confirmation to the taxpayer (Purba et al., 2019).

2.1.2. Compliance

Tax compliance abides by established tax laws and government or tax body regulations. It is the accurate calculation of tax liability and payment of exact tax within the stipulated time window, maintaining proper tax records and submitting tax returns as specified by tax authorities. Tax compliance is necessary for individual and corporate taxpayers to escape penalties and legal consequences for violations and contribute to the nation's economic development through taxes. According to (OECD, 2016), tax compliance is conforming to the tax compliance metrics (registration, filing, reporting and payment).

2.2. Empirical Review

Carter et al. (2011) combined individual perceptions of security, efficacy and trust with the UTAUT model to create a simple yet comprehensive explanation for adopting e-files. Questionnaires were distributed to 304 US taxpayers to capture their perception of the RTFS. The research model was tested by multiple regression and the outcomes showed that the UTAUT components effectively describe rationale in using government e-service platforms and three UTAUT constructs—PE, EE and SI—have been found to be particularly substantial in predicting taxpayer intentions of using ETFS. According to the study's results, specific element like web-specific self-efficacy (WSSE) and perceived security control, along with UTAUT components, substantially impact taxpayers' intentions to file returns electronically. The study also showed that specific factors like web-specific self-efficacy (WSSE) and perceived security control, along with UTAUT components, substantially influence taxpayers' intent to file returns electronically. However, the study suffered some limitations; because the respondents' socio-economic level and cultural backgrounds were not sufficiently diversified and participants were from limited geographical locations.

Geetha and Sekar (2012) assessed e-filing of income tax: Awareness and Satisfaction level of Individual Taxpayers in Coimbatore city, India. The study disclosed the level of satisfaction among current e-filer users. However, the majority of taxpayers are unaware of ETFS and e-payment processes even exist. Therefore, there is a need for adequate announcement of the new tax software to taxpayers to create sufficient awareness among taxpayers. Lu and Nyuyen (2016) investigated Vietnam's deployment of an ETFS as an e-government service. This study merged three constructs each (PE, EE, SI, FC, Information quality, system quality and service quality) from UTAUT and IS's success in assessing taxpayer

intention to utilize the ETFS. The study examined structural relationships between the six constructs using 156 users of the ETFS. The study's hypotheses were put to the test using multiple regression. The study's conclusions validate the importance of integrating the UTAUT models and the IS success model to forecast taxpayers' intention to file electronically.

Rahayu et al. (2017) scrutinized the role of taxpayer awareness, tax laws and understanding of tax compliance to provide the government with information for long-term socialization of the value of paying taxes. The base theory for the study was the theory of knowledge and understanding tax regulation. A quantitative approach was employed and 278 respondents were surveyed via questionnaires. Their study revealed that taxpayer awareness, knowledge and understanding of tax regulations have a substantial direct influence on TC, which simultaneously contribute to the compliance behavior of taxpayers.

The level of ETFS adoption and individual TC in Indonesia was examined by Natasya et al. (2019). The UTAUT model served as the study's foundation and it primarily focused on the original factors—PE, EE, social impact and FC postulated by Venkatesh, along with three moderating variables—age, gender and occupation. The study found that e-filing is helpful in boosting participant commitment to disclose their tax returns and to fulfill their tax obligations voluntarily.it was discovered that PE, EE, FC sufficiently impacted participant decisions to utilize the e-tax filling system. The study's most notable finding is that the social influence construct did not significantly influence participants' intention to use the ETFS because tax regulation made it mandatory for them. However, the overall result does not represent the total population due to the limited sample size.

Mas'ud (2019) sought to understand the reaction of micro-business owners in Northwestern Nigeria toward the introduction of E-filing. The study was established on the UTAUT model, used a mixed-design approach and distributed 384 questionnaires to respondents. According to the analysis of the survey, PE served as the primary predictor of respondents' willingness to adopt e-filing since they felt that doing so would improve their capacity to pay taxes. EE was discovered to be the second predictor; their perception of how simple they will find e-filing will affect their acceptance of it. The third predictor of e-filing acceptability was discovered to be social influence. Also, the result showed that awareness of the ETFS has a considerable detrimental impact on its acceptance among micro-entrepreneurs.

Masud and Umar (2019) expanded the explanation of UTAUT to describe the structural implication of trust in e-filing software on the choice or intent of micro-entrepreneurs in the service sector to utilize the e-tax filing system. Data from 158 micro-entrepreneurs from five service industries, the study employed a quantitative research method and used PLS-SEM in analyzing collected data. According to the data analysis result, SI, EE and PE have a substantial impact on micro-entrepreneur's trust in the software and their decision to utilize provided e-filing platform. Zakari et al. (2019) also expanded the UTAUT model through the inclusion of perceived trust in tax software or platforms as a moderating variable in the research model for ETFS adoption on corporate taxpayers. The study relied on secondary data sourced from the IFRS portal spanning 5 years (2014-2018). The study concluded that perceived trust in the ETFS affects its usage.

Tjen et al. (2019) examined the incorporation of prior experience and trust into the IS success model and their effect on e-filing usage in Indonesia. The study examined how elements such as prior experience with manual tax filing, trust in government and technology and trust in e-filing websites influence information system quality. A web-based questionnaire was administered to 993 taxpayers, while covariance-based structural equation modeling (CB-SEM) was adopted for data analysis. The study result showed that trust in technology and government positively influences all three IS quality dimensions. On the other hand, perceived usefulness and user satisfaction of e-filing websites are discovered to be consistently and substantially influenced by information quality, system quality and service quality.

In a different study, Ayaz and Yanartas (2020) used the UTAUT to explore the variables impelling the usage and use of an electronic document management system (EDMS) at Bartn University in Turkey. According to the study, behavioural intention to utilize EDMS is primarily determined by PE. Numerous earlier investigations, including (Venkatesh et al. 2003; Kim et al., 2016; Mosweu et al., 2016), supported this result. Additionally, it was found that SI has a considerable impact on one's inclination to utilize EDMS, a conclusion that is also backed by (Tosuntaş et al., 2015; Salloum et al., 2018; Sorgo and Sumak 2016). Contrary to earlier research, it was discovered in this study that the EE construct has no discernible impact on the intent to use EDMS, a finding that is also supported by a relatively small number of investigations (Zhou, 2012; Afonso et al., 2012; Isaias et al., 2017; Verkijika, 2018). In conclusion, the research revealed that PE and SI elements within the suggested model are responsible for 61% of the intent to accept EDMS.

Mukuwa and Phiri (2020) explore how SMEs' adoption of electronic services in Urban Zambia impacts e-tax revenue generation and tax compliance. UTAUT model was employed to pinpoint elements that affect SMEs' adoption and use of electronic services. The study purposefully sampled 400 SMEs. The study employed a descriptive research design. Descriptive and correlation analyses were carried out on the collected using the social package for statistical science software (SPSS) package. The analysis revealed meaningful development in revenue generation and compliance with tax regulations among SMEs since the introduction of e-services. The study also indicates that PE, EE and SI influence SMEs behavioral intentions to use e-services.

Widyari et al. (2021) used the Delone and Mclean model to investigate the impact of ETFS performance on tax compliance sampled 128 MSME selected by random sampling. A questionnaire was designed to gather data and SEM-PLS was employed to analyse data analysis. The study showed that information and system quality positively influence user satisfaction, while trust in e-government has no impact on either use or user satisfaction. A study by Tahar et al. (2021) examined the evidence of the impact

of perceived usability, perceived security and PU on Indonesian intentions to embrace e-filing using IT preparedness as an intervening variable. The outcomes of a multiple linear regression analysis performed on the dimensions show that perceived security and simplicity of use have a favourable influence on e-filing. In contrast, perceived usefulness has no bearing on whether or not individual taxpayers use the system. It implies that the quality of e-filing should increase as the likelihood of taxpayers using the system increases, especially in the areas of usability and security.

Zakari (2021) investigated ETFS usage among corporate tax preparer in Nigeria, considering the variables that affect their behavioural intention. The study adapted and expanded the UTAUT model by including these variables: Perceived convenience (PC), system quality (SQ), service quality (SEQ), trust of internet system (TIS) and trust of government (TG) to understand the adoption of e-filing in the Nigerian setting. The study's sample size comprised 359 corporate tax preparers, web-based questionnaires were distributed to the selected sample size and data gathered were analyzed using PLS-SEM. The study revealed that PE, EE, FC, PC and SQ substantially influence e-tax filing system usage behavioural intent. Additionally, TG significantly moderated the impact of PE, EE and SI in predicting BI to accept the ETFS. Nevertheless, the study was limited to the tax Consultants and not the taxpayer.

Alias and Ibrahim (2021) studied in Sarawak on the examination of tax e-filing acceptance by applying the UTAUT model. A total of 630 questionnaires were administered to individual taxpayers. The research objectives were accomplished using multiple regression and descriptive. The findings show a substantial positive link between PE and FC and the adoption of the ETFS, while SI has a significant negative relationship. In contrast, EE was found to be not significant. Additionally, Sarawak taxpayers had a high level of intention to use the ETFS.

Mathewos (2021) assessed the adoption of the ETFS and variables that influence its acceptance and usage among the significant taxpayers in Addis Ababa city. The study modified the UTAUT model to include awareness (AW), perceived risk (PR) and web quality (WQ) in the existing constructs. Data were collected through a questionnaire distributed to 384 respondents and analysed using descriptive and inferential statistics (the ordinal logistic regression model). The study found that PE, EE, SI, AW, WQ and PR substantially affect taxpayer intent and use of the ETFS.

2.3. Theoretical Framework

The unified theory acceptance and use of technology model served as the foundational framework for the study (Venkatesh et al., 2003). The rationale behind the choice of this theory; firstly, the theory combines features of eight competing theories. Secondly, from the literature review, it was found that limited studies on e-tax filing in Africa, especially in Nigeria, underpinned their studies on UTAUT theory compared to the developed world. Therefore, more African evidence, particularly from Nigeria, is required. Thirdly, this theory allows expansion to consider other variables not inclusive in the model but can equally affect technology acceptability. Lastly, the soundness of the UTAUT as a research apparatus and tool as an influencer of behavioural intention and adoption behaviour.

In Figure 1, some adjustments will be made to the UTAUT model. Firstly, on the note of openness of UTAUT recommended by Venkatesh et al. (2003) to accommodate other elements that elucidate the adoption of behavioural use of technology, the study, therefore, considers the integration of trust and awareness as predictors of e-filing acceptance intention. Secondly, the construct relating to facilitating conditions and voluntariness of use as a moderator are excluded because these constructs are irrelevant to individual e-filing usage. To better understand the taxpayer dispute about the ETFS, the theoretical framework uses three out of four moderating variables, age, gender and experience, to regulate the basic concepts of UTAUT on technology acceptance, as shown in Figure 1.

3. METHODOLOGY

3.1. Study Design

The study employed a descriptive survey research design to understand insight and opinions about the research problems, with the aid of structured questionnaire. The study population was SMEs in Lagos State, estimated at 91,097 (SMEDAN/NBS, 2021) within Lagos State. The unit of analysis was company employees who have experience handling tax-related matters, including any of the CEO, finance managers, accountants of the selected SMEs and tax consultants. Purposive sampling technique was used to identify the respondents who provided the information required for the study. The study used the Taro Yamane formula to determine the minimum sample size (398), given the heterogeneity of the population. The Cronbach's Alpha coefficient result is 0.721, indicating that the research instrument is stable and reliable.

3.2. Model Specification

The model specification was anchored on the Unified Theory of Acceptance and Use of Technology. Technology acceptance variables such as PE, EE, SI, FC, TS, AW are considered as the function of compliance to establish the effect of ETFS on compliance. Elements such as age, gender and experience influence UTAUT constructs and also have moderating effects on some of them. In the UTAUT model, demographic variables moderated tax compliance. The following model was generated based on the theoretical framework adapted.

$$\text{Tax compliance} = f(PE, EE, SI, FC, TS, AW, A, G, E) \quad (1)$$

The model is displayed thus below

$$TCi = \beta 0 + \beta 1PEi + \beta 2EEi + \beta 3SIi + \beta 4FCi + \beta 5TSi + \beta 6AWi + \beta 7Ai + \beta 8Gi + \beta 9Ei + ei \quad (2)$$

Where;

TC = Compliance

β_0 = Intercept term

PE = Performance expectancy

EE = Effort expectancy

SI = Social influence

FC = Facility condition

TS = Trust in E-tax filing System

AW = Awareness

A = Age

G = Gender

E = Experience

$\beta_1 \ldots \beta_9$ represent the estimated coefficient and

ei = Error term.

3.3. Method of Data Analysis

Data collected were analysed using percentages, tables, frequency and ordinal logit regression techniques.

4. RESULTS AND DISCUSSION

4.1. Socio-Demographic Characteristics of SMEs

This section presents the demographic characteristics of respondents including designation, registration status, year of registration and business location of SMEs. Table 1 reveals that 72.6% identified as male and 27.4% as female. The observed disparity in gender distribution underscores the need to investigate potential gender-related influences on the study outcomes. The age distribution shows that most respondents 31.4% were in the age bracket of 26-30 years, 26.9% were within the range of 31 to 35 years, 17.8% were in the 36-40 years range, 9.8% fell under the 41-45-year range, 9% under 20-25 years old range, 3.5% falls under 46-50 years and 1.5% fall above 50 years. The concentration of respondents in the 26-30 age group prompts consideration of age-related influences on the study. Further exploration is warranted to understand how age dynamics may impact study outcomes.

In Table 1, the respondents have diverse educational levels, 69.6% hold a first degree, 26.6% hold a master's degree, 0.5% hold a PhD and other educational level with 3.3%. This showed that all respondents were well-educated. Concerning the designation of respondents, the study showed that 5.8% were CEOs, 20.9% were Finance Managers, 64.1% were accountants and 9.3% belonged to the other category. 96.7% of the respondents indicated their businesses are tax-registered while the remaining percentage is non-tax-registered. SMEs' years of registration as taxpayers showed that 7.8% were below 1 year, 50.8% had registered for 1-5 years, 24.9% had registered for 6-10 years, 10.8% had written for 11-15 years and 5.8% had registered for 16 years and above. The business location shows that 59.3% of the respondents were on the mainland and 40.7% on the Island. The difference in business locations prompts consideration of potential geographical influences on study outcomes.

Regarding business form 62.1% of the sampled, according to the distribution of company forms, represent limited liability companies. Smaller fractions of businesses are sole proprietorship (25%) and partnerships (12.6%). The result provides insight into how adopting the ETFS is embraced by different business forms. The findings show how SMEs are distributed based on business age and usage of ETFS; 30.7% of SMEs who have been in business for a period of 1-5 years have a higher percentage. The proportion of SMEs declines as business age increases. This distribution data sheds light on how adopting ETFS differs at various phases of business development. The analysis also revealed how SMEs adopt various methods of tax filing. 69.1% of the SMEs file returns via electronic means, which indicates a high level of adoption. In comparison (24.4%) combine manual and electronic methods, although a lesser percentage (6.5%) still use manual methods.

Table 1: Socio-demographic characteristics of SMEs

Variables	Survey question	Frequency	Percentage
Gender	Male	289	72.6
	Female	109	27.4
	Total	389	100
Age	20-25 years	36	9
	26-30 years	125	31.4
	31-35 years	107	26.9
	36-40 years	71	17.8
	41-45 years	39	9.8
	46-50 years	14	3.5
	Above 50 years	6	1.5
	Total	389	100
Educational qualification	First degree	277	69.6
	Master	106	26.6
	Ph.D.	2	0.5
	Others	13	3.3
	Total	389	100
Designation	CEO	23	5.8
	Finance Manager	83	20.9
	Accountant	255	64.1
	Other	37	9.3
	Total	389	100
Are you a registered taxpayer?	Yes	385	96.7
	No	13	3.3
	Total	389	100
Year of registration	Below I year	31	7.8
	1-5 years	202	50.8
	6-10 years	99	24.9
	11-15 years	43	10.8
	16 years and above	23	5.8
	Total	398	100
Business location	Mainland	236	59.3
	Island	162	40.7
	Total	398	100
Form of business	Sole-proprietorship	101	25.4
	Partnership	50	12.6
	Limited liability	247	62.1
	Total	398	100
Age of business	Below 1	13	3.3
	1-5 years	122	30.7
	6-10 years	81	20.4
	11-15 year	64	16.1
	16-20 years	41	10.3
	21-25 years	22	5.5
	26 years and above	55	13.8
	Total	398	100
Which method of filing do your business use	Manual	26	6.5
	Electronic	275	69.1
	Both	97	24.4
	Total	398	100

Source: Field Survey (2023)

4.2. Effect of E-tax Filing System on SMEs Compliance in Lagos State

The study utilized the ordinal logit regression model to analyze the effects of the ETFS on compliance among Lagos State SMEs.

Table 2 presents details of the model's goodness of fit. The model was fitted using the logit link function. The -2 log-likelihood value for the model stands at 577.449, signifying good fitness between the model and the datasets. The model degree of freedom is 30 and the chi-square for the model is statistically significant ($P < 0.001$), indicating that the final model significantly improves over the intercept-only model.

Table 3 shows the model goodness-of-fit. The goodness-of-fit test provides information on whether the model fits the data well. The Pearson and Deviance Chi-square test is 767.291 and 564.338, respectively, at 1068 degrees of freedom. These results are indicators that the model fits the data very well.

Table 4 presents the pseudo. Cox and Snell (0.284) and Nagelkerke (0.339) indicated that the model explains a substantial amount of the variance in the data. Nagelkerke (0.339), which has the greatest R-square, is considered the best fit.

Parameter estimates were presented in Table 5 with estimated coefficients of the independent variables, their standard errors, the Wald test, P-values and the confidence interval of the coefficients at 95%. The coefficients indicate how the log odds of belonging to a higher category of the dependent variable change when the independent variable increases by one unit holding all other variables constant. Standard errors indicate estimate precision and the Wald Chi-square statistics and P-values assess the null hypothesis that the coefficient equals zero. With a significant coefficient (with a $P < 0.05$), the observed effect is less likely to result from chance. Conversely, a non-significant coefficient suggests that the effect might be attributed to chance. Ordered values Likert scale questions with strongly disagree, disagree, neutral, agreed and strongly agree were used to measure the dependent variable. The estimates in the table show the effect of the predictor variables on the outcome variable. In this context, the variable takes on an ordinal nature with four distinct levels. The dependent variable is grouped into four thresholds (TaxC = 2-TaxC = 4) with an estimate for each group. The independent variables, PE = 5, EE = 5, FC = 5, SI = 5, TFA = 5 and TES = 5, are all assigned a value of 0, signifying their status as reference categories.

SMEs transitioning from disagree to neutral category in performance expectancy (PE) reduce the likelihood of higher tax compliance by 0.428. With ($t = 0.513$, $P = 0.608$), it shows PE is insignificant, suggesting an increase in PE positively influences tax compliance (TC). SMEs shifting from neutral to agree level in PE have a 0.185 decrease in higher TC likelihood. Significant at 5%. The result indicates that PE significantly correlates with higher compliance. Transitioning from agree to agree in PE strongly reduces higher TC likelihood by 0.383, signifying significance at a 5% significance level. The findings underscore the relationship, highlighting that increased PE enhances compliance.

SMEs moving from neutral to agree-in effort expectancy (EE) decreases the probability of being at a higher TC level by 0.737 compared to strongly agreeing. At 5% significance ($t = 0.208$, $P = 0.835$), this suggests a greater degree of compliance will be

Table 2: Model fitting information for SMEs

Model fitting information				
Model	**2-Log Likelihood**	**Chi-square**	**Df**	**Sig.**
Intercept Only	710.417			
Final	577.449	132.968	30	0.000

Link function: logit
Source: Author's computation (2023)

Table 3: Goodness of fit for SMEs

Goodness-of-Fit			
Pearson and deviance test	**Chi-square**	**Df**	**Sig.**
Pearson	767.291	1068	1.000
Deviance	564.338	1068	1.000

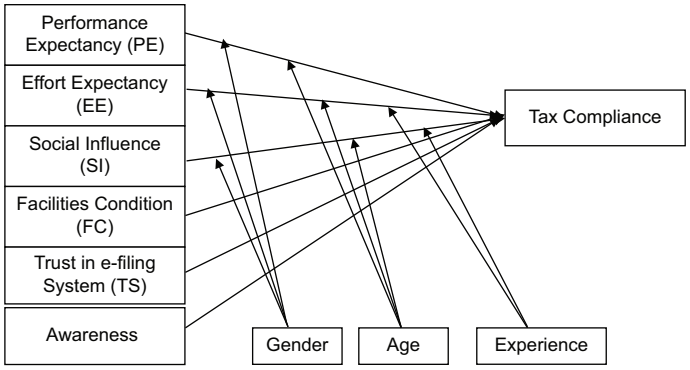
Link function: logit
Source: Author's computation (2023)

Table 4: Pseudo R square for SMEs

Pseudo R square	
Cox	0.284
Nagelkerke	0.339
Mcfadden	0.183

Link function: logit
Source: Author's computation (2023)

Figure 1: UTAUT constructs



Source: Adapted from Abdulsalam Masu'd (2019)

achieved by improving EE. As SMEs shift from neutral to agree in EE, there is a 0.278 decrease in the probability of being at a higher TC level than firmly deciding SMEs. A significant result ($P < 0.05$) indicates EE considerable impact on TC. As SMEs change over from the agree to agree with category on EE strongly, there is a 0.616 decrease in the likelihood of falling into higher TC. Although statistically non-significant ($P < 0.05$). The study suggests improvement in EE increased TC. SMEs moving from disagree to neutral in FC see a 0.410 drop in higher TC likelihood compared to those strongly agree, insignificant ($P > 0.05$) at a 5% significance level. The study suggests that improving FC will bring about improved TC. SMEs migrating from neutral to agree in FC experience a 0.749 decrease in the probability of being in a higher level of TC. Although not significant ($P > 0.05$) at a 5% significance level, this shows that compliance improves as FC is improved. SMEs transitioning from agree to agree in FC strongly indicate a 0.790 decrease in the likelihood of falling to a higher TC level. The non-significant suggests improved FC enhances compliance. Moving from disagree to neutral on Social Influence (SI) decreases SMEs' TC likelihood at a higher level by 0.811,

Table 5: SMSs parameter estimate

Parameter	Estimate	Odds Ratio	Std. Error	T-test	95% Wald Confidence Interval		Hypothesis Test		
					Lower	Upper	Wald Chi-Square	Df	Sig.
Threshold									
[TaxC=2]	−9.220	9.9E-05	1.529	6.030	−12.217	−6.223	36.355	1	0.000
[TaxC=3]	−4.509	0.011	1.109	4.066	−6.683	−2.336	16.530	1	0.000
[TaxC=4]	−0.450	0.638	1.082	0.416	−2.571	1.671	0.173	1	0.678
Location									
[PE=2]	−0.849	0.428	1.654	0.513	−4.091	2.394	0.263	1	0.608
[PE=3]	−1.685	0.185	0.633	2.663	−2.926	−0.445	7.093	1	0.008*
[PE=4]	−0.960	0.383	0.308	3.121	−1.563	−0.357	9.743	1	0.002*
[PE=5]	0[a]	1							
[EE=2]	−0.305	0.737	1.464	0.208	−3.173	2.563	0.043	1	0.835
[EE=3]	−1.282	0.278	0.560	2.289	−2.379	−0.184	5.240	1	0.022*
[EE=4]	−0.485	0.616	0.292	1.660	−1.058	0.088	2.755	1	0.097
[EE=5]	0[a]	1							
[FC=2]	−0.893	0.410	0.779	1.146	−2.419	0.634	1.314	1	0.252
[FC=3]	−0.289	0.749	0.409	0.707	−1.091	0.513	0.499	1	0.480
[FC=4]	−0.236	0.790	0.327	0.722	−0.876	0.404	0.521	1	0.470
[FC=5]	0[a]	1							
[SI=2]	−0.210	0.811	0.510	0.412	−1.210	0.790	0.169	1	0.681
[SI=3]	0.317	1.373	0.348	0.912	−0.365	0.999	0.831	1	0.362
[SI=4]	−0.009	0.991	0.252	0.036	−0.502	0.484	0.001	1	0.971
[SI=5]	0[a]	1							
[AW=2]	−1.170	0.310	0.904	1.294	−2.942	0.602	1.675	1	0.196
[AW=3]	−1.810	0.164	0.441	4.1	−2.675	−0.945	16.810	1	0.000**
[AW=4]	−1.129	0.323	0.289	3.914	−1.695	−0.564	15.320	1	0.000**
[AW=5]	0[a]	1							
[TS=1]	−0.265	0.767	0.395	0.671	−1.039	0.509	0.450	1	0.502
[TS=2]	−0.221	0.802	0.367	0.600	−0.940	0.499	0.360	1	0.548
[TS=3]	0.340	1.405	0.625	0.544	−0.885	1.565	0.295	1	0.587
[TS=4]	−1.000	0.368	0.691	1.448	−2.353	0.354	2.097	1	0.148
[TS=5]	0[a]	1							
[GENDER=1]	0.470	1.600	0.258	1.821	−0.036	0.976	3.316	1	0.069
[GENDER=2]	0[a]	1							
[AGE=1]	−0.797	0.451	1.029	0.775	−2.814	1.220	0.600	1	0.439
[AGE=2]	−0.175	0.839	0.981	0.179	−2.097	1.747	0.032	1	0.858
[AGE=3]	−1.078	0.340	0.968	1.114	−2.975	0.819	1.240	1	0.266
[AGE=4]	−1.004	0.366	0.974	1.031	−2.913	0.905	1.063	1	0.303
[AGE=5]	−0.980	0.375	0.985	0.995	−2.911	0.951	0.990	1	0.320
[AGE=6]	−1.607	0.200	1.097	1.465	−3.757	0.543	2.147	1	0.143
[AGE=7]	0[a]	1							
[EXP=1]	0.125	1.134	0.718	0.175	−1.282	1.533	0.030	1	0.861
[EXP=2]	−0.020	0.980	0.588	0.035	−1.172	1.131	0.001	1	0.972
[EXP=3]	0.814	2.258	0.595	1.369	−0.351	1.980	1.875	1	0.171
[EXP=4]	−0.023	0.977	0.641	0.036	−1.280	1.234	0.001	1	0.972
[EXP=5]	0[a]	1							

Sig. <0.000**
Sig. >0.01 <0.05*
Link function: logit
Source: Author's computation (2023)

which is insignificant (P > 0.05). The study indicates a reduction in disagreeing stances of SI will increase TC. Shifting SMEs from neutral to agree in SI raises the likelihood of higher compliance by 1.373. At a 5% degree of insignificance (P = 0.362), this suggests that a rise in SI will reduce non-compliance. SMEs transitioning from agree to strongly agree in SI experience a 0.991 decrease in higher compliance likelihood. Although, not-significant (P > 0.05), SI increase aids compliance.

SMEs shifting from disagreeing to neutral in e-tax filing awareness experience a 0.310 decrease in the probability of being in a higher level on TC but not significant. Transitioning SMEs from neutral to agree in e-tax filing awareness reduces higher TC likelihood by 0.164, significant (P < 0.05) at 5%, implying that e-tax filing awareness significantly affects compliance. Shifting SMEs from agree to agree strongly decreases the probability of higher TC by 0.323, statistically significant at 5%, which suggests that e-tax filing awareness significantly influences compliance.

Shifting SMEs from strongly disagree to disagree in e-tax filing trust reduces higher TC likelihood by 0.767, non-significant (P > 0.05), boosting trust improves compliance. Conversely, moving from disagree to neutral in trust decreases the probability of higher compliance by 0.802, also not significantly, with a t = 0.600 and P = 0.548. Thus, boosting trust in the e-tax filing system appears to improve compliance. As SMEs move from

neutral to agreeing in trust for e-tax filing, the likelihood of higher TC increases by 1.405 compared to those strongly agreeing. The findings imply that boosting trust reduces non-compliance. Moving from agree to agree strongly decreases the compliance likelihood by 0.368, which is insignificant (P > 0.05), indicating that greater trust in e-tax filing promotes compliance. Examining respondents' gender, the shift from male to female indicates a 1.600 increase in the probability of males being in the higher level in TC, though not significant at a 5% significant level (P > 0.05). An increase in males suggests reduced non-compliance.

Shifting from 20-25 to 26-30 years reduces the probability of higher compliance by 0.451 compared to those aged 50 and above, though not significantly (P > 0.05), hinting at improved compliance with age reduction. When shifting from 26-30 years to 31-35 years, the likelihood of higher compliance decreases by a factor of 0.839, though not significantly (P = 0.858), indicating lower age may boost compliance. Similarly, transitions from 31-35 years to 36-40 years, 36-40 years to 41-45 years and 41-45 years to 45-50 years result in reduced compliance likelihood, although not significantly. Lastly, moving from 45-50 years to 50 years and above minimizes the probability of higher compliance by a factor of 0.200, though this change is also insignificant (P > 0.05). Overall, age changes seem to influence compliance, but significance levels vary.

SMEs moving from less than a year to 1-5 years of registration increases TC likelihood by 1.134, though not significantly (P > 0.05). More experience may reduce non-compliance. Conversely, transitioning from 1-5 years to 6-10 years decreases compliance by 0.980, not significantly (P = 0.861). Progressing from less than a year to 6-10 years and then to 11-15 years increases TC likelihood by 2.258, though not significantly (P = 0.171). Moving from 11-16 years to 16 years and above decreases compliance by 0.977, not significantly (P > 0.05). Experience's role in compliance varies in significance.

Table 6 presents the test for parallel lines. This test is for the assumptions of proportional odds to know whether the assumptions are met. The analysis tests the null hypothesis that the odds of each independent variable are consistent or the same across different thresholds of the dependent variable. The test shows that the assumption of proportionality was not violated. Thus, the null hypothesis can be accepted.

The regression model of the effect of the e-tax filing system and compliance among SMEs. The odds ratio linking to each coefficient designates the multiplicative changes in the log odds of being in a higher group on the dependent variable per unit increase on the independent variable. The significance of each coefficient indicates whether the associated predictor variable's effect holds statistically significant or not. A coefficient is considered adequate if its P < 0.05. PE had a significant likelihood of affecting tax compliance compared with the reference category (strongly agree) as the odds ratio and statistical significance at 5% showed that neutral response (0.185; P < 0.008) and agree response (0.388; P < 0.002). The result suggests that enhancing performance expectancy will result in an enhancement of tax compliance. This finding aligns with the research by Natasya et al. (2019) and Masud and Umar (2019), which concluded that boosting performance expectancy will enhance tax compliance. Mukuwa and Phiri (2020) and Mathewos (2021) also supported this finding.

Table 6: Test of parallel lines for SMEs

Test of parallel lines				
Model	**−2 Log likelihood**	**Chi-square**	**df**	**Sig.**
Null Hypothesis	577.449			
General	503.957[b]	73.492[c]	60	0.113

Link function: logit
Source: Author's computation (2023)

Effort expectancy had a significant likelihood of predicting tax compliance compared with the reference category (strongly agree), as the odds ratio and statistical significance at 5% showed a neutral response (0.258; P < 0.022). The result implies that improved effort expectancy will lead to improved tax compliance. This observation aligns with the research findings of Mas'ud and Umar (2019) and Mukuwa and Phiri (2020), who both affirmed that reinforcing effort expectancy contributes to increased tax compliance. E-tax filing system awareness had a significant possibility of influencing tax compliance compared to the reference category (strongly agreed) as revealed by the odds ratio and statistical significance at 5% of neutral response (0.164; P < 0.000) and agree response (0.323; P < 0.000). The result indicates that improving e-tax filing awareness will boost tax compliance. This conclusion resonates with the research conducted by Geetha and Sekar (2012) and Rahayu et al. (2017), who found that improving e-tax filing awareness contributes to more tax compliance.

5. CONCLUSION

The study concluded that performance expectancy, effort expectancy and e-tax filing awareness significantly affect tax compliance among SMEs in Lagos. The study recommended that Nigeria tax authorities should enhance the performance expectancy, effort expectancy and e-tax filing awareness in Lagos State by addressing technical issues, streamlining the filing process, and improving user interface design.

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