# USE OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) IN TAX ADMINISTRATION AND TAX COMPLIANCE IN NIGERIA

#### BY

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### Abstract

In most economies, tax authorities have reaped the benefits of digitisation and increased revenue collection by integrating technology into their operations. This study uses a case-based approach to examine how the use of information communication technology influences tax administration and tax compliance in Nigeria. Over time. The Nigerian tax system has not been able to influence its stated perceived objectives as a result of some delays and challenges which include; lack of stewardship amongst taxpayers, collection of taxes, complex tax payment method and tax offsetting; lack of technical experience, tax evasion, fraud, government instability which prompts noncompliance with relevant tax laws, poor database recordkeeping. The conclusion of this study is that investors will find it easier to fulfill their tax obligations to the federal and state governments through convenient and transparent electronic tax payment platforms, and tax authorities will be able to easily share information on a tax payer. In the light of this, the use of ICT in tax administration has typically increased the degree of tax compliance in Nigeria. While there are certain drawbacks to using ICT in tax administration, the benefits far outweigh the perceived and practical drawbacks and thereby make a recommendation that FIRS should implement a Mobile App electronic tax site that is compatible with a variety of mobile operating systems.

Keywords: E-taxation, Tax Compliance, Electronic Tax System, E-registration and ICT

### Introduction

The revenue earned for the provision of infrastructural facilities is critical to any nation's rapid growth and development. Companies operate with the goal of making a profit, and they rely on the government for crucial services. On the other hand, the government is working to build road networks, provide energy, social services, and water supplies, as well as develop human resources. The amount of tax paid by businesses is an important part of the contribution they make to the economy as a whole. Meeting the requirements of society necessitates large sums of money that an individual or society cannot contribute alone, and one method of obtaining finances is through taxation (Murkur, 2001). As a result, taxation is a substantial source of money for governments all over the world. It's a way for the government to get the money it needs to meet its pressing obligations. It has an impact on the Gross Domestic Product (GDP), which is the standard metric for assessing a country's economic health (Okafor, 2012). Sanni (2007) proposes using taxes as a social engineering tool to boost overall economic development. A tax system is one of the most effective ways of mobilizing a country's internal resources and tends to promote economic growth by establishing an atmosphere favourable to it (Azubike, 2009).

Over time, the Nigerian tax system has not been able to influence its stated perceived objectives as a result of some delays and challenges which include; lack of stewardship amongst taxpayers, collection of taxes, complex tax payment method and tax offsetting; lack of technical experience, tax evasion, fraud, government instability which prompts noncompliance with relevant tax laws, poor database recordkeeping etc. Technology is meant to help us improve our daily activities for the best with less task (Madumere & Ubani, 2020). A strong tax system provides the government with tremendous opportunity to earn additional income to meet its pressing obligations. Furthermore, an efficient tax system would provide an effective means of mobilizing a country's internal resources while also allowing for the creation of an atmosphere favourable to economic progress (Maisiba & Atambo, 2016). Tax is imposed on a subject and any property that may be in one's name by the government in order to provide security, social amenities, and establish circumstances for the economic well-being of the society (Maisiba & Atambo, 2016). In the last decades, technology has advanced to such an extent that computers have taken over various activities that were formerly performed manually by humans. Most governments, organizations, corporations, and individuals have incorporated technology systems and the internet of things in various businesses to remain competitive and

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sustainable. Technology adoption has accelerated the rise of e-commerce and e-governance concepts, and tax administrators throughout the world are no exception, since it has become vital to use computer systems and networks in the process of tax registration, filing tax returns, and paying taxes (Badara, 2012; Newman & Eghosa, 2019).

Technology has influenced people's life in a variety of ways and continues to do so, from simple day-to-day activities to more sophisticated and less normal duties. Technology has an impact on every aspect of life, including commerce, entertainment, education, communications, healthcare, defense, and taxation (PWC, 2013). Globally, there has been a tremendous shift toward digitization during the last decade. The majority of industries are working to improve and modernize their company operations. Technology solutions are being used by business activities and processes to expand the usage and context of digitized data. In most economies, tax authorities have reaped the benefits of digitisation and increased revenue collection by integrating technology into their operations. Some tax agencies in Nigeria are likewise embracing digitisation, with onerous manual processes being replaced by more convenient electronic services for taxpayers. In 2017, the Federal Inland Revenue Service (FIRS) announced the launch of six (6) new electronic tax services (e-services) for the convenience of Nigerian taxpayers, including e-Registration, e-stamp Duty, e-TaxPay, e-Receipt, e-Filing, and e-TCC.

### **Electronic Tax System in Nigeria**

The electronic tax system can be defined as a system in which the necessary authorities collect taxes from taxpayers electronically over the internet. It is an online policy that allows taxpayers to access service porters over the internet and view all of the tax administration's services, such as registration for creating a personal identification number, filing returns, and applying for a compliance certificate. Nigeria's electronic tax system is still in its early stages and is very new. The reports of the International Monetary Fund (IMF) Fiscal Affairs Division visiting teams in 2004, 2005, and 2006, which suggested the adoption of an Integrated Tax Administration System, foreshadowed its arrival in Nigeria (ITAS). In December 2010, the Federal Executive Council gave the FIRS permission to purchase, install, and use the ITAS (Usman, 2013). The ITAS aims to automate and re-engineer the FIRS tax administration process, as well as the purchase, installation, and deployment of Standard Integrated Government Tax Administration System (SIGTAS) and hardware infrastructure (Usman, 2013). In 2015, the F.I.R.S. joined with the Nigerian Interbank Settlement System (NIBBS) to enable electronic tax payment in Nigeria. This is the automation of all tax processes, including tax registration, assessment, and return filing, as well as tax payment. The goal was to implement an electronic system that would make it easy to pay taxes online in Nigeria's major cities (Abdulrazaq, 2018).

According to Deloilte Nigeria Blog (2017), the F.I.R.S rebuilt the electronic tax system in June 2017 to run nationwide by providing six new electronic tax services (e-services). The available e-services are:

**E-registration:** This allows new tax payers to register with the Federal Inland Revenue Service (FIRS) for various taxes. Taxpayers who use this service do not need to go to a tax office to register for tax reasons; instead, they must go to the F.I.R.S. website and register.

**E-stamp duty** is a method of paying stamp duties on papers that meet certain criteria. This innovation would make it easier for Nigerians to do business. In the past, physical stamping was required to complete transactions that required stamping. Stamping may be done anywhere, at any time, online using e-stamping; one area where this innovation is particularly valuable is when a new company is incorporated at the Corporate Affairs Commission (CAC). You can pay your stamp duties by migrating from the CAC registration site to the FIRS e-service portal.

**Payment of taxes via the internet:** Taxpayers who get an email notification of a tax due date have two alternatives for making payments: debit or credit card payments made through a payment processing business. Direct debit of the taxpayer's account is also an option for payment. This occurs when the IRS automatically deducts the amount owed from the taxpayer's bank account, along with additional costs.

Technological modernisms are having a significant impact on the management of fiscal systems and the collection of taxes. In Nigeria, the information and telecommunications sector has proven to be a major driver of the internet economy (Abiola, 2014). In recent years, the use of technology to improve tax administration effectiveness, increase taxpayer services, and promote tax compliance has gotten a lot of attention in both developed and developing countries (Dowe, 2008; Olaoye and Kehinde, 2015). According to Amitabh et al. (2008), e-tax would aid revenue authorities in timely completion and processing of tax returns and issuance of refunds, as well as in making key administrative decisions in tax administration and compliance functions, by providing a source of the most comprehensive, authentic, and current financial, business, and economic data for policy formulation within the government.

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E-tax is a concept that allows people to electronically file their tax returns and pay their taxes. In other words, tax administrators and taxpayers communicate online, and compliance is improved as a result of the online platform. Three key principles underpin the electronic tax system: electronic registration, electronic filing (e-filing), and electronic payment (e-payment) (Andarias, 2006). Returns are filed and payments are made through the internet in most e-filing and e-payment systems, and the tax administrator sends an electronic confirmation verifying receipt of the return and/or payment. The taxpayers also receive a debit confirmation from their financial institution in the case of e-payments. The operation of the tax system has been substantially challenged since the growth of ICT (Muita, 2011), and one of the ways in which tax authorities have enhanced contacts with taxpayers is through the e-tax system (Wasao, 2014). The electronic tax system improves the quality and amount of data available to tax officers, allowing them to process transactions more quickly and accurately. Any tax administration's principal goal, no matter where they are in the world, is to increase revenue collections via enhancing tax compliance. Prior to the introduction of the electronic tax system, tax administrators were hampered in carrying out their principal responsibilities effectively and efficiently. Tax evasion and avoidance, according to Adegbie and Fakile (2011), have played a significant role in reducing revenue accruable to the Nigerian government. Tax administration will be better positioned if: tax regulations and processes are simple; tax compliance costs are minimal; taxpayers have easy access to information; and taxpayers and tax authorities have mutual trust. If more income is to be generated, computer technology must be matched with political resolve to enforce tax collection. Furthermore, the taxpayer's identity number may be linked to other forms of identification such as driver's licenses, passports, or even bank account opening. Nigeria might achieve significant headway in revenue diversification if it had a corrupt-free and effective administrative machinery, as well as employees that are appropriately qualified, well-equipped, and motivated.

**E-receipt:** E-receipts are electronic receipts that are generated for a transaction from the confirmation page. E-receipts are proof of payment, showing that a payment or a transaction has been done in your bank accounts. Alternatively E-receipts can be generated from the transaction journey page, on the dashboard for all completed transactions (Abdulrasaq, 2018). An E-receipt displays the transaction name, transaction details along with date and time stamp. It's a configurable feature; the user can view the E-receipt button on the transaction only if it is configured

E-filing: This allows taxpayers to electronically file their tax returns through the FIRS ITAS. E-filing allows taxpayers to use the FIRS' Integrated Tax Administration System to file their tax returns (ITAS). All Federal government taxes and levies can now be paid electronically via the Nigeria Inter-Bank Settlement System (NIBSS), Remita, or Inter-switch platforms. E-registration is a system that allows new taxpayers to register with the Inland Revenue Service or the Internal Revenue Service for various taxes. These are some of the most innovative components of e-tax services Nigeria. The filing of tax returns is a statutory requirement. You can submit essential papers and file your tax returns electronically using FIRS website, this avenue eliminate the need to visit a tax office. Taxpayers must have an email address, log on to the tax office's website, and download the appropriate form (Umenweke & Ifediora, 2016). The taxpayer's name, residence, identification number, exemption, income, tax credit/deduction, other taxes and payments, amount owed, and so on must all be filled out. After filling out the tax return form, the taxpayer signs it and submits it with the tax office using a self-selected identification number. Following the submission of the completed return form, the entire electronic record is sent to the tax office for processing, where a free file is used. As soon as the tax return is received, an email is sent to the taxpayer. Following that, the tax return is assessed, and the tax due to the taxpayer is computed within 48 hours. When errors are found, an error message is given to the transmitter, instructing him or her to remedy the error and re-send the return to the tax office (Umenweke & Ifediora, 2016).

**E-TCCs** (Electronic Tax Clearance Certificates): Taxpayers can use this platform to apply for, receive, and verify the validity of their E-TCC. The manual tax administration process makes obtaining a tax clearance certificate difficult. A certificate is automatically provided to tax payers' email addresses using E-TCC, and the legitimacy of the certificate may be verified on the e-service website. These e-service projects combine tax administration innovation and technology to make FIRS Services convenient, easy, and available anywhere and at any time (vanguard newspaper, 2017). Although there is no complete legislative structure in place in Nigeria to govern the operation of the electronic tax system, the National Tax Policy (NTP) encourages the use of technology in the administration of tax laws. The policy stipulates. "Federal and state tax agencies should adapt quickly to changes in the business environment that affect tax administration and build a feasible framework to accommodate taxpayer needs in this regard" (NTP, 2018).

In the instance of Nigeria, the electronic tax system, which was implemented in 2013, included e-Registration, e-Payment, e-Filing, e-Receipt, e-Stamp Duty, and e-TCC (Akpubi & Igbekoyi, 2019). E-taxation is the method of collecting and administering taxation through the use of an electronic medium. According to Che-Azmi and

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Kamarulzaman (2014), an e-tax payment system is an ICT-based architecture that helps governments throughout the world collect tax revenue and use it to offer public services that improve the citizenry's standard of living. According to Wasao (2014), an electronic tax system is an online system or channel through which taxpayers can gain access or permit the them to access all of the services provided by the tax authority using the internet from the comfort of their own home, such as registration for the generation of a Tax Identification Number, and electronic tax filing of tax returns. In Nigeria, taxes are divided into three categories: those collected by the federal government, those collected by the state, and those collected by the local government. The Federal Inland Revenue Service is in charge of assessing and collecting corporate income taxes, petroleum profit taxes, VAT, education taxes, and other taxes while the states are in charge of individual taxation (personal income tax) within their boundaries (Naomi & Sule, 2015).

### **Tax Administration Solution (TAXPRO-MAX)**

As part of efforts at modernising tax administration in Nigeria, FIRS has introduced a tax administration solution (TaxPro-Max) for ease of tax compliance. TaxPro-Max enables seamless registration, filing, payment of taxes and automatic credit of withholding tax as well as other credits to the Taxpayer's accounts among other features, TaxPro-Max also provides a single-view to taxpayers for all transactions with the service. Effective from 7<sup>th</sup> June, 2021, the Tax-Pro-Max becomes the channel for filling Naira-denominated tax returns.

- Taxpayers are put on notice that:
- i. All Naira denominated tax returns are to be filed via the TaxPro-Max solution in order to generate the obligatory "Document Identity Number (DIN)"
- ii. Taxpayers will not be able to pay without the DIN; as such, taxpayers wanting to submit their tax returns manually must visit the relevant tax office where FIRS personnel will be on hand to assist them to upload the returns and generate DIN
- iii. Taxpayers are expected to bring manual returns for upload at least, two weeks before the due date.

### Benefits of ICT in Tax Administration in Nigeria

With the implementation of the Integrated Tax Administration System in 2013, the Federal Inland Revenue Service began the process of tax computerization (ITAS). The system consists of a collection of programs aimed at streamlining and improving tax administration, encouraging voluntary compliance, and safeguarding relationships with other stakeholders through the use of technology. The program is tailored to address the needs of emerging countries looking to gain more control over government revenue by implementing computerized processes. The computerized tax system is a significant accomplishment and a noteworthy attempt on the part of the FIRS to improve Nigeria's taxation system. The system has benefited both tax authorities and taxpayers. Most of the issues noted with the manual tax system have been addressed by the system, which has shown results and solutions. The advantages do not stop there. The development of the Integrated Tax Administration System (ITAS) for tax filing has made paying taxes easier and less complicated.

In contrast to the conventional or manual tax system, which is tedious and exhausting, it has reduced the amount of time spent in filing tax returns. It has considerably improved tax compliance. Second, with the implementation of this system, the problem of machinery and a lack of staff to manage taxes has been reduced to a bare minimum. It's also cut down on the quantity of paperwork the IRS has to deal with. The system's efficiency has improved, which has boosted revenue generation. Third, it provides a database management system for taxpayers, boosting the quality and amount of information available to the government and making the processing of taxpayer information faster and easier. By minimizing corruption and increasing taxpayer trust in the system, this promotes reliability, accuracy, accountability, and stewardship. Another benefit of ICT, is the Tax Collection Economy, which is a more cost-effective way of collecting taxes as well as lowers its operating and overhead costs (Abiola, 2014). Unlike the manual tax system, where taxpayers suffer some expense by coming into the tax office for payment, clarification, and compliances, it allows taxpayers to spend little or no money remitting taxes and filing returns. Fourth, Improve Voluntary Tax Compliance- the e-tax system was designed primarily to improve the ease and comfort of paying taxes, with the goal of eventually incorporating an efficient and transparent system that maximizes voluntary compliance and tax revenue production (Usman, 2013). The system accomplishes this by maintaining a database for taxpayers that aids in the verification of compliance.

The FIRS has said through various press releases that the deployment of ITAS will replace the current manual system of filing tax returns, consequently improving tax compliance, access to tax services, and payment processes. According to FIRS press releases (Vanguard 2013, This Day Live 2013, and Punch 2015), a full implementation of ITAS (e-taxation) will help corporations to:

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Explain the problems of Nigeria's traditional physical system of taxation; Provide modernized, efficient processes that make it easier for taxpayers and other stakeholders to cooperate with the service, making the FIRS more open to taxpayers' needs; Improve voluntary tax compliance and create a more welcoming environment for taxpayers in Nigeria;

Ensure better transparency in the actions and practices of tax authorities for the sake of accountability and good stewardship; Re-engineer tax administration service delivery, eliminate gaps and notices in the current administrative systems, and increase contribution to national development; Reduce the overall cost of administration in the federation of Nigeria.

### Challenges of Electronic Tax system in Nigeria

Nigeria's electronic tax system faces a number of obstacles, including a low level of computer literacy and a high cost of putting up an electronic tax system (Umenweke & Ifediora, 2016). Its efficiency is also greatly reliant on the availability of a reliable internet connection. Several parts of Nigeria now lack reliable internet access, particularly in rural areas. Although there has been a steady increase in the number of people with internet access and improved connectivity, much more needs to be done, as the percentage of people without internet access in Nigeria is around 50% of the population, despite the country's estimated population of 198 million in 2018 (NPC, 2018). The difficulty is exacerbated by Nigeria's inconsistent energy power supply. Another issue with Nigeria's electronic tax system is that only the Federal Tax Authority, or FIRS, has fully automated its processes. Many tax authorities still use manual tax processes or a combination of manual and electronic tax systems at the state level. The current arrangement makes it difficult for federal and state tax officials to work together effectively to avoid double taxation. State tax authorities must automate their operations as soon as possible in order to create the necessary synergy with the Internal Revenue Service (Badara, 2012).

Investors will find it easier to fulfill their tax obligations to the federal and state governments through convenient and transparent electronic tax payment platforms, and tax authorities will be able to easily share information on a tax payer and build up a comprehensive tax history of taxpayers, which will help Nigeria improve its ranking on the ease of doing business index. The most serious threat to Nigeria's computerized tax system is cyber thieves attempting to breach the integrity of tax revenue service portals. Electronic tax fraud (cyber tax crime) poses a significant threat to the development and long-term viability of electronic tax systems (Akpubi & Igbekoyi, 2019).

### Effectiveness of Electronic Tax Administration in Nigeria

For effective and efficient utilization of tax administration in Nigeria, the following need to be put into consideration:

**Upgrade of Data Management Systems:** The Nigerian tax authorities would need to modify their servers to manage the expected volume of traffic from portal users in order to improve the taxpayer experience. This will reduce downtime and encourage more taxpayers to use the electronic processes because of their convenience (Jotopurnomo & Yenni, 2013).

Smart use of Data Analytics and Information Management Systems: Data analytics and real-time data access can be game changers when it comes to maximizing the benefits of electronic tax administration. Uses of electronic tax invoices for VAT purposes, for example, UK is a success story in this regard. By successfully lowering the need for annual tax returns and offering a single picture of a taxpayer's affairs through a portal on the Government website, the United Kingdom (UK) has progressively transformed itself into one of the most digitally sophisticated tax countries (Abdulrasaq, 2018). The UK tax authorities can also use information from its database to pre-populate personal tax forms, such as an individual's earnings and taxes paid.

Effective Integration of Tax Database with existing Database Management Systems: To extend the tax net, tax authorities should consider leveraging existing data from banks and other government organizations. The Nigerian government has already taken a step in the right direction, as Section 10 of the Companies Income Tax Act (CITA) has been amended to require that every company have a tax identification number (TIN), which must be displayed on all business transactions with other companies and individuals, as well as corporate documents and correspondence with tax authorities, ministries, and government agencies. More crucially, banks and other financial institutions are now obliged to require TIN as a pre-requisite for opening business bank accounts or maintaining current accounts (Abiola, 2014).

**Enhanced Tax Audit and Verification Systems:** For the tax authorities, a risk-based audit, which links the likelihood and character of an audit to the taxpayer's inherent hazards, will be a time-saving tool. Furthermore, the effling platforms should be capable of allowing taxpayers to file tax returns, get assessment alerts, and respond to them online. The e-TCC platform, for example, should allow taxpayers to check the status of their TCC applications

online and be notified when new information is needed to update their records and process their application further (Usman, 2013).

**Security of Taxpayers' Data:** Using current cyber security solutions to address security concerns on online platforms will help taxpayers have more faith in the system. To protect the data of taxpayers, the portals should use strong encryption. To set up and log in to a taxpayer's account online, strong passwords should be necessary. For a taxpayer to access his account, multifactor authentication (requiring more than simply a username and password) should be accessible.

# **Components of Electronic Tax System**

## **Electronic Tax System**

### **Electronic tax registration**

- Acquisition of TIN by taxpayers
- Online amendment of taxpayers details

### **Electronic filing of tax returns**

- Online filing of tax returns
- Online amendment of tax returns

### **Electronic tax payments**

- Electronic generation of payment slips
- Real time update of taxpayers ledger account

### **Revenue generation**

- Improved monitoring of taxpayers
- Improved service delivery to taxpayers
- Improved compliance

### **Electronic Tax System Model Framework**

#### **Tax Compliance**

According to Verboon & Dijk (2007), tax compliance is defined as people' readiness to comply with appropriate tax authorities by paying their taxes. Tax compliance is described as a tax liable body's ability to submit accurate, comprehensive, and satisfactory returns to the authority for the purpose of tax assessment in accordance with the state's tax laws and regulations. Tax compliance, according to Sarker (2003), is the degree to which a taxpayer conforms or fails to comply with his country's tax rules. According to Brown and Mazur (2005), tax compliance is a multifaceted measure that can be defined theoretically by considering three distinct types of compliance: payment compliance, which means timely payment of all obligations, filing compliance, which means timely filing of any required return (the accurate reporting of income and of tax liability). Compliance was classified into two categories by the Organisation for Economic Cooperation and Development (OECD) in 2001: administrative compliance and technological compliance. Compliance with administrative norms of lodging and payment is referred to as administrative compliance. This compliance is also known as regulatory compliance or reporting compliance.

Technical compliance refers to following tax rules' technical requirements. Public relations, tax education, tax advice and guidance, and examination can all help to ensure tax compliance. According to Wenzel (2004), the connection between the tax authority and the taxpayer fosters a positive relationship that influences the taxpayer's

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attitude. According to Alm and Torgler (2006), tax payers' trust in the government boosts their positive attitude and commitment to paying taxes. The end result is voluntary compliance, which is demonstrated by willingly submitting and filling out tax forms, as well as paying tax obligations as and when they become due.

### Tax Awareness and Electronic-Taxation

According to Muliari and Setiawan (2011), awareness of taxes is a state in which a person understands, acknowledges, respects, and obeys the applicable tax regulations with a strong desire to comply with them. While Nugroho (2012) describes tax consciousness as a moral attitude that makes a contribution to the state in order to support the country's development and strives to follow all regulations set by the state and enforced on the taxpayer. In terms of tax payment, Rantung and Priyo (2009) look at three different types of consciousness. For starters, paying taxes is a way of contributing to the progress of a country. Taxpayers want to pay taxes since the tax collected does not harm them. Second, the state suffers greatly as a result of the delayed payment of taxes and the decrease of the tax burden. Taxpayers prefer to pay their taxes because they recognize that delaying payments and reducing the tax burden over time depletes financial resources, which can cause delays in the country's development and with the new innovation by FIRS by introduced electronic tax system, this will ease the burden of remit tax to the relevant tax authority. Third, a statutory tax can be enforced. Because tax payment has a firm legal base and is an indisputable duty of every person.

Tax payers' awareness of their perceptions determines their compliance with paying taxes. The greater the level of awareness among taxpayers, the better able they will be to determine their conduct in line with taxation requirements, resulting in a high compliance rate among taxpayers (Nalendro, 2014). According to Muliari and Setiawan (2011), the greater the taxpayers' understanding and implementation of tax duties, the better their compliance.

### **Theory of Innovation Diffusion**

The innovation diffusion hypothesis is the study's underpinning theory. Everett Rogers, a communication studies professor, proposed this hypothesis. He popularized this notion in his book "Diffusion of Innovations," which was first published in 1962 and was updated in 2003. This hypothesis explains how, why, and at what rate new technologies and ideas spread. According to Rogers (2003), diffusion is the process through which innovation is conveyed to members of a social system over time through a specific channel. The most remarkable characteristic of diffusion theory, according to Ofurum, Amaefule, Okonya, and Amaefule (2018), is that most members of the social system's innovation decisions are highly influenced by the innovation decisions of other members of the system. Because decisions are neither authoritative nor collective, each social system member must make his or her own innovation decision, which follows a five-step process: Persuasion favourable/ negative attitude towards innovation, decision- making a choice whether to accept or reject innovation, implementation- putting innovation into use, and confirmation- analyzing the effects of an innovation-decision already made.

According to Rogers (2003), there are four major factors that impact the dissemination of a new idea: the invention itself, communication channels, time, and a social system that primarily relies on human capital. He goes on to say that there are five types of people who will adopt a new idea: innovators, early adopters, early majority, late majority, and laggards. The theory is pertinent to this study in terms of e-taxation in Nigeria because it addresses numerous factors that influence the propagation of a new idea such as e-taxation and how it is employed.

### **Review of the Previous Studies**

Akpubi and Igbekoyi (2019) assessed the effect of level of awareness on electronic tax on tax compliance by small and medium scale enterprises (SMEs) in Lagos state. The study employed the survey research design. Data were collected from primary sources through the use of structured questionnaire distributed to the SMEs at their place of work. A sample size of two hundred and eighty-one. Analysis of the study revealed that level of awareness (LOA) showed significant positive relationship with tax compliance. The tax compliance cost showed a non-significant negative effect on tax compliance. The study concludes that the level at which the tax payers are aware of the electronic tax filing system will determine their compliance rate and the compliance cost may discourage the tax payers from using the system if it is higher. Madumere and Ubani (2020) focused on electronic taxation and tax fraud in Rivers State of Nigeria. Using simple and Pearson product correlation coefficient which is used to ascertain the relationship of the variables. A sample size of 236 from the 15 tax offices in Rivers State was used. The findings of the study revealed that electronic tax filing system has a transposed relationship with tax evasion, that electronic tax payment system has a reverse relationship with tax evasion. The study relationship exists between electronic tax filing system as well as electronic tax payment system.

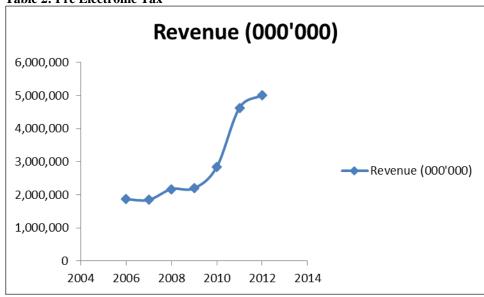
Stella and Oboh (2020) examine the ease with which taxes are paid through Nigeria's electronic tax system, and how convenient it is for tax payers in Nigeria to pay taxes. From the extant literature reviewed, it was revealed that payment of taxes in Nigeria is not stress-free. The uneasy nature of paying taxes in Nigeria through the electronic tax system is due to some challenges which include lack of fully automated system; poor access to the Internet; unawareness of the system; low computer literacy level; and perception to change since the system is new. Chukwuebuka, Ogochukwu, David and Sheila (2020) analyzed the impact of e-tax assessment on income generation in Nigeria. The study applied secondary data gotten from Federal Inland Revenue Service tax report and CBN Statistical release and Quarterly Economic Reports. These information were time arrangement information covers the period from first quarter of 2012 to second quarter of 2018. The information gathered were broke down utilizing Ordinary Least Square Method. The outcomes show an idealistic huge impact of pre (before the starter of e-tax assessment) company income tax and value added tax on income generation in Nigeria.

Table 1: Tax Revenue Pre and During E-Tax System in Nigeria

Pre	E-Tax	Pre E-Tax Revenue	<b>During E-Tax Years</b>	<b>During E-Tax Revenue</b>
Years		(Nation)		(₩'Million)
2006		1,866,200	2013	4,714,500
2007		1,846,900	2014	4,805,700
2008		2,972,200	2015	3,741,800
2009		2,197,600	2016	3,307,940
2010		2,839,300	2017	4,027,940
2011		4,628,500	2018	5,320,520
2012		5,007,700	2019	5,349,400
			2020	4,900,000

Source: CBN Statistical Bulletin, 2016 & FIRS, 2020.

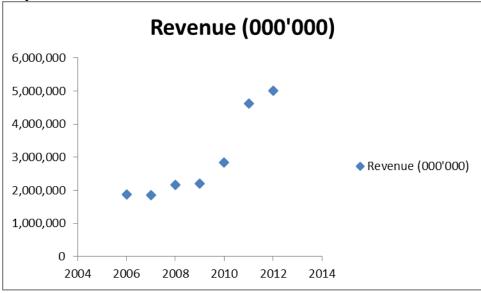
**Table 2: Pre Electronic Tax** 



Source: Author's Computation, 2021

The table 2 revealed that prior to the introduction and adoption of electronic taxation in Nigeria, the revenue generated from the taxes was not encouraging and so many malpractices was unavoidable as revealed in the table 2 from the low revenue from taxes generated which prompt the introduction of electronic taxation.

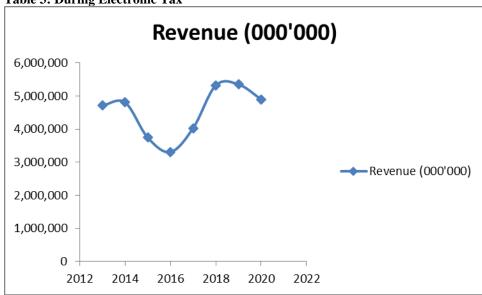
**Graphical Illustration of Pre E-Tax Revenue** 



Source: Author's Computation, 2021.

The graphical illustration above support the table 2 which shows the graphical illustration of revenue generated through taxes. The graph revealed that revenue generated during pre- electronic taxation was low as a result of so many factors ranges from tax evasion, corruption in the collection of taxes, improper filling among others.

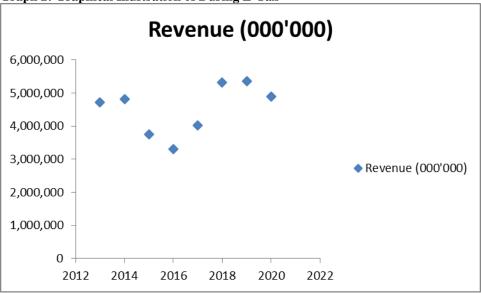




Source: Author's Computation, 2021

The table 3 revealed the revenue generated during the introduction and application of electronic taxation. The table also revealed that there is an improvement in the revenue generated as a result of the application of electronic system of collecting taxes.

**Graph 2: Graphical Illustration of During E-Tax** 



Source: Author's Computation, 2021

The graphical demonstration above shows the improvement of revenue through application of electronic taxation and it got to a point in 2019 to 2020 where there is declined in the revenue. This is as a result of decline in the price of crude oil in the world market and sudden appearance of coronavirus pandemic that badly affect the Nigeria economy in which it affect the revenue generated in those years.

#### Conclusion

The study indicates that electronic-tax has typically increased the degree of tax compliance in Nigeria, based on the literatures examined and data analysis. While there are certain drawbacks to using electronic taxation in tax administration, the benefits far outweigh the perceived and practical drawbacks. Unlike manual tax structures, electronic tax administration systems establish a clear link between time to comply and tax payments, and they allow tax authorities to check transactions in real time rather than depending on manual tax reports.

### Recommendations

As a result of the study's conclusion, the recommends that:

- i. FIRS should implement a Mobile App electronic tax site that is compatible with a variety of mobile operating systems. As mobile phones become more common, this will undoubtedly enhance uptake and compliance among taxpayers.
- ii. State tax authorities need to automate their operations as soon as possible in order to create the necessary synergy with the Federal Inland Revenue Service.

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