

## E-Governance and Tax Administration in Cross River State

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### Abstract

It is worth noting that the traditional way of administering tax-related matters in the country, particularly Cross River State, left much stone unturned. Therefore, the introduction of modern technology called electronic governance is the right step in the right direction. This study was poised to investigate the e-governance and tax administration in Cross River State. Two hundred and twenty-two (222) respondents' views were purposively sampled using the 20-item E-governance Efficiency on Tax Administration Questionnaire (E-GEAQ). Data were analyzed using the Pearson Moment Correlation Statistical technique and Statistical Package for Social Sciences (SPSS) software version 20. Findings from this study revealed that e-governance and administration help in reducing waste and ensure efficiency in tax administration thereby leading to a reduction in the number of collecting staff as well as reducing corruption in the entire process. This is corroborated by the opinions of the respondents as represented by 99(44.8%). A key policy issue, therefore, is the need to eliminate the use of manual collection of taxes in Cross River State. This will enhance the administration taxes in the study areas and the country at large.

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### **Background to the Study**

The cumulative government efforts in directing interventions and private investment have expanded the implementation of e-governance in Nigeria. Mohammed, Abubakar & Bahir (2010) posited that, currently, some components of e-governance have been implemented in some Ministries, Departments and Agencies (MDAs) including the Nigerian Customs Services, Nigerian Immigration Service, Federal Capital Territory Administration, Independent National Electoral Commission (INEC), Joint Admissions and Matriculations Board (JAMB), National Examination Council (NECO), Nigerian Broadcasting Commission (NBC) amongst others. This innovation has found expression in the areas of revenue generation, collection, and administration as well as in reducing cost, preventing fraud, and increasing efficiency in certain jurisdictions. Internal revenue generation has become of paramount interest considering the constant fluctuations of oil prices in the international market which is the mainstay of the Nigerian economy as well as oil theft and vandalization of oil installations. These among other acts have drastically reduced the inflow of revenue available for sharing between the various tiers of government in line with section 162 of the 1999 constitution as amended, hence the discourse on how to significantly boost internal revenue generation as corroborated by the findings of (Adenugba & Ogechi, 2013).

Despite the importance of tax as a viable non-oil revenue source, there exists a plethora of factors militating against the Nigerian tax administration and tax-related matters. On their part, Stephen, et al., (2017) identified poor administration of tax policies, the inability of relevant agencies to prioritize tax efforts, and the multiplicity of tax and non-availability of tax statistics as factors that impede effective revenue collection in Nigeria. Similarly, Omodena et al (2018) identified a lack of cooperation from the taxpayers and, a want of uniformity in the incidence of tax laws and systems as challenges confronting internally generated revenue collection in Nigeria.

In a bid to stem some of the obstacles enumerated above, the government at both federal and State levels has introduced a series of innovations. One such innovation is the application of Information Communication Technology (ICT) in revenue administration. This consists mainly of the electronic means of assessment, payment, tax assessment returns, amendment of assessment were based on Best of Judgment (BOJ) or wrong assessment due to dearth of data and refusal to amend. Nevertheless, the researcher desires to explore how the application of Information Communication Technology affects tax administration and tax-related matters for accountability and integrity in Cross River State with specific reference to Cross River State Internal Revenue Service.

### **Purpose of the study**

The main thrust of the study is to examine the composite relationship between e-governance and tax administration in the Cross-River State Internal Revenue Service

### **Hypothesis**

There is no significant relationship between e-governance and tax administration in the Cross-River State Internal Revenue Service

## Literature review

### E-Governance and Cost of Tax Administration

Tax administration generally and simply refers to the management, conduct, direction, and supervision of the execution and application of a government, country, or state tax law, tax legislation, and their related statute. According to Gurama and Mansor (2015), tax administration involves assessing, collecting, and administering tax processes. In Nigeria, the tax administration processes involve tax legislation, administration, enforcement of tax laws collection, allocation, distribution, and expenditure of tax revenue. There have been several studies that have examined the relationship between the adoption of e-governance and tax administration. Richards and Ekhaton (2019) examined the challenges and prospects of electronic taxation in Nigeria. The study showed that deploying electronic solutions to tax administration involves 'the application of computer techniques in the process of tax assessment, collection, and administration, generally referred to as e-payments and e-filing'. This concept according to the study is termed e-taxation and it is an extension of the growing concept of e-governance and e-commerce. The objective of adopting ICT solutions in tax administration processes is "to replace cumbersome manual, bureaucratic service systems, with collaborative, efficient, process-driven and secure on-line delivery systems"(Houzwit, 2018 in Richard & Ekhaton 2019).

E-governance in tax administration or more specifically e taxation is relatively new in Nigeria and still evolving. In December 2010, the Federal Inland Revenue Service (FIRS) was approved by the Federal Executive Council to procure, install, and implement the Integrated Tax Administration System (ITAS). The ITAS is aimed at re-engineering and automating the FIRS tax administration processes as well as the procurement, installation, and deployment of the Standard Integrated Government Tax Administration Solution (SIGTAS) and hardware infrastructure. In 2015, the FIRS partnered with the Nigerian Interbank Settlement System (NIBBS) to provide I.C.C.L.R. for the electronic payment of taxes in Nigeria. This is an automation of all tax processes from tax registration, assessment, and filing of returns to payment of taxes. The objective was to adopt an electronic system to make it easier to pay taxes online in major cities across Nigeria. In June 2017, the FIRS restructured the electronic tax system to operate nationwide by introducing six new electronic tax services (e-services). The available e-services are:

**E-Registration:** This is for the registration of new taxpayers with FIRS for the various taxes. With this service, taxpayers do not need to visit any tax office to register for tax purposes. All they need to do is to visit the FIRS website and register.

**E-Stamp Duty:** This is for payment of stamp duties on qualifying documents. This innovation will increase the ease of doing business in Nigeria. In the past, physical stamping was required to perform transactions that require stamping. With e-stamping, stamping can be done anywhere and at any time online. One area in which this innovation is very useful is when a new company is being incorporated at the Corporate Affairs

Commission (CAC). From the CAC registration site, you can migrate to the FIRS e-service site and pay your stamp duties.

**E-Tax Payment:** This is for payment of all Federal Government taxes and levies through any of the following platforms Nigeria Inter-Bank Settlement (NIBSS), Remita, and Interswitch. This brings payment of taxes to your doorstep as you can pay your taxes in the comfort of your home.

**E-Receipt:** This is for receiving and verifying e-receipts generated for taxes paid through the new e-tax payment. With this, you receive an instant notification acknowledging your payment of tax.

**E-Filing:** This enables taxpayers to file their tax returns through the FIRS ITAS online. This is one of the most innovative aspects of e-tax services. It is a mandatory requirement of the law to file tax returns. This platform obviates the need to visit any tax office to file tax returns as you can upload relevant documents and file your tax returns electronically.

**Electronic Tax Clearance Certificates (e-TCC):** this platform will enable taxpayers to apply for, receive, and verify the authenticity of their e-TCC. Obtaining tax clearance certificates under the manual tax administration process is cumbersome. The advantages derived from the above innovations in tax administration range from the safe cost of tax administration, increased transparency, and accountability as well as mitigate or eliminate the cumbersome process of registration, filing, payment, and other matters connected therewith, associated with the Manual revenue collection process.

Richards and Ekhaton (2019) in their study further implied that e-governance reduces the cost of tax administration. According to the findings of the study, e-governance 'obviates the need for cumbersome manual paperwork in the filing of tax returns and preparation of tax assessments, which leads to administrative efficiency, in conformity with the canons of a good tax system of simplicity, equity and efficiency'. Azmi and Kamarulzaman (2010 in Bisong & Jam-Hil 2020) carried out a similar study on the impact of e-governance on the cost of tax administration. The study pointed out that the advantages accompanying e-payments of taxes extend to both the tax authorities and taxpayers. Among them include ease-of-use for the taxpayers, reduction in calculation errors on tax return forms, minimization of workload on tax authorities, reduced cost of processing, storage and handling of tax returns, and so on. In essence, automating the tax administration process leads to greater efficiency and saves costs that would have been expended using the manual system.

Similarly, Ojeka et al (2011) carried out a study on the role of e-governance in Nigeria's tax system: strategy perspective to enhancing compliance. The study examined some of the key concepts associated with e-governance and stated that the government has benefited immensely from the introduction of e-governance. This is possible because it is less cumbersome to process tax payments and it saves cost by eliminating excessive

paperwork. On their part, Olatunji and Ayodele (2017) carried out a study on the Impact of Information Technology on Tax Administration in Southwest, Nigeria. The study specifically investigated the effect of information technology on tax productivity and the relationship between information technology on tax implementation and tax planning. The findings were that information communication technology affects tax productivity; and that, there exists a relationship between the various information communication innovations and tax planning as well as tax implementation respectively. Based on the findings of the study, the study concluded that information technology led to cost-effectiveness for the Inland Revenue Agency.

Furthermore, Dzidonu (2012) itemized the benefits of using information technology to manage the operations and delivery of public sector institutions to include: improvement in administrative efficiency, effectiveness, and productivity, improvement in service delivery, reduction in administrative, operational, and transactional costs of public and provision of access to information at a reduced cost. Regarding taxation, the significance of the use of information technology (IT) is infinite, some of which are; facilitate a reduction in the overhead cost of managing the agencies of government responsible for tax administration, instant computation of tax liability from the use of online tax calculator, reduced cost of registering tax payers and instant generation of tax identification number, reduction in staff-taxpayers collusion as regards tax liability, reduction in fraudulent activities of tax collectors in the aspect of non-remittance of tax received from taxpayers and boost the revenue of government in terms of reduction in expenses (administrative, overhead and transactional) and corrupt practices.

Adewoye et al (2013) opine that the anticipated benefits of implementing an information technology system include improvements in productivity, better profit performance, and a higher degree of accuracy of information. Productivity typically improves in organizations that implement information technology, although there can be some loss of productivity during the "learning curve." (Adewoye & Olaoye, 2014). To buttress the forgoing, Oni et al (2012) carried out a study on E-Government Implementation: The Case of State Government Websites in Nigeria. The findings of the study indicated that e-governance in tax administration involves building and maintaining functional websites which involves large sums of money. The study fundamentally disagreed that e-governance led to a reduction in the cost of governance. The position of the paper was that whatever money was saved was still expended in maintaining the online portal for processing taxes.

To amplify the ongoing discussion, Decman et al (2010) carried out a study on e-government and cost-effectiveness in tax administration. The study denied the claims that e-governance significantly eliminated the cost of operations for the revenue-collecting agency. According to the study, 'Despite several shortcomings of the analyses, the first estimates indicate that the annual cost savings for tax administration and taxpayers are lower than the ICT expenditure required to introduce prefilled personal income tax returns. If one considers e-taxation as a long-term project, ICT expenditure is

still higher than cost savings on both sides (government and taxpayer). Part of the reason is numerous and frequent changes to tax regulation and tax procedures since no ICT solution has been used for more than one or two years. However, ICT implementation costs are lower than implementing those regulatory changes using paper-based systems.<sup>1</sup>

Similarly, Nasir (2015) in his study examined the implementation of electronic tax filing and payment also in Malaysia; with the sole objective being to underscore the benefits associated with maintaining a good e-tax system as opposed to the manual processes. The study made use of secondary data from the Malaysian Inland Revenue reports from 2004 to 2011 using trends analysis to highlight the increase in tax returns since the adoption of the e-tax system in 2004. For the first two years, the number of taxpayers using the e-filing system remained far below expectation at about 5% and the tax authorities were still tackling the challenges posed by the new system such as timely and costly adaptation of the system, uncertainty, and security problems, lack of technological exposure in the country, etc. all of which had little or no impact. Furthermore, tax returns from 2006 to 2011 after the complete implementation of the e-filing show or brought a significant increase from the vexatious 5% tax returns to 34% and 37% in 2012, with a corresponding increase from 14.5% to 15.3% GDP.

The study also shows how compliance increased with minimal cost in terms of time in the collection of taxes. The study concluded that the electronic system of filing and tax collection and payment, if properly efficiently deployed and effectively managed tends to benefit the taxpayers and tax authority in varying degrees, hence increasing the standard of living for the citizenry.

Allahverd et al (2017) examine the impact of e-taxation on tax revenue and cost in Turkey, with secondary data assembled from the Turkey Revenue Authority. The data were presented in two groups to wit, the pre-electronic tax period of 1993-2004 and the post-electronic tax period, of 2004-2016 while adopting the Mann-Whiney U Test in data analysis. The commentaries from empirical data for the study revealed that the post-electronic tax system has a significant effect on tax revenue generation and consequent reduction of costs in tax administration and collection. The study also provided relevant information on the electronic tax transformation of the Turkish tax system and its benefits.

In a similar study by Olaoye and Atitilola (2018), They x-rayed the effect of the e-tax payment system on revenue generation in Nigeria with the study spanning six (6) years and three (3) quarters, specifically from the first quarter of 2012 to the second quarter 2018. The period of pre-e-taxation covered thirteen quarters specifically, between the first quarters of 2012 and to first quarter of 2015 while the post-e-taxation era covered thirteen quarters, spanning from the second quarter of 2015 to the second quarter of 2018. The analysis of data was done using trend analysis, descriptive statistical tools of mean and standard deviation, and paired simple t-tests respectively. The findings revealed that “there was a significant positive difference between the pre, and the post-value added tax revenue with t-statistic and p-value of 0.520 and 0.612 respectively. This connotes that e-

tax payment has an insignificant impact on Value Added Tax (VAT) revenue in Nigeria. Lastly, the finding also revealed that there is a positively insignificant difference between pre- and post-Capital Gain Tax revenue with t-statistic and p-value of 1.218 and 0.247 respectively.”

In Nigeria, where the level of implementation of e-governance in revenue collation seems to be limited as demonstrated by empirical studies reports with a consequent marginal increase in revenue generation as demonstrated by Ofunem et al (2018). They examined the impact of e-taxation on Nigeria's revenue generation profile, economic growth, and development with emphasis on how its implementation in 2015 has affected tax revenue (federally collected revenue and tax to GDP ratio). The study employed secondary sources of data from the Federal Inland Revenue Service (FIRS) and Central Bank of Nigeria (CBN) statistical and Economic reports. The data was divided into pre-tax and the post-tax era. The findings of the study indicate that electronic taxation has not improved revenue generation and collection. The study further maintained that rather than increased revenue generation, revenue decreases after the implementation of e-tax administration and collection while acknowledging that, the difference not being significant. They attributed the result to a lack of knowledge of the usage of electronic services and recommended an awareness campaign to educate the citizenry on electronic tax payments.

In a similar vein, Stephen et al (2017) conducted a study on the role of e-governance in the Nigerian tax system. The study revealed that implementing e-governance as a way of ensuring tax compliance can serve as a key to increasing revenue. E-governance has improved revenue reforms and has ensured that all leakages that drain revenue were promptly blocked, they asserted. Thus, with the advent of e-governance, the size of internally generated revenue rose considerably. On their part, Adewoye et al (2013) opine that the anticipated benefits of implementing an information technology system include improvement in productivity, better profit maintenance, and a high degree of accuracy of information and data. In truth, the use of e-governance can positively lead to increased revenue.

Similarly, Olatunji and Ayodele (2017) examined the impact of information communication technology on tax administration in Southwestern Nigeria with specific emphasis on the relationship between information technology and tax productivity. The result shows that information technology enhances the level of tax productivity. Brantigham (2008) has also shown that the electronic system of tax is the sine qua non to enhancing government-generated revenue and setting up a modern economy integrated into its regional and international environment.

In a related direction, Amabali (2009) conducted a study on the antecedents of paperless income tax filing by young professionals in India. He employed regression analysis and consequently concluded that; “the antecedents of young Indian professionals depended on the perceived ease of the tax system, personal innovativeness in information

technology, relative advantage, the performance of filing service, and compatibility". On their part, Pippin and Tosun (2014) studied electronic tax filing in the United States of America to underscore its impact on revenue generation. They examine electronic filing using analyses of demographic, socio-economic, and geographic factors affecting electronic tax filing in the United States spanning 1999, and 2004–2007 as well as the progress in electronic filing between 1999 and 2007 respectively. Data used for the studies were primarily secondary and collected from the Internal Revenue Service Statistics of Income ("SOI") Division. Further demographic and geographic data were sourced from the Bureau of Economic Analysis (BEA), the Bureau of Labor Statistics (BLS), and the Census Bureau while data were analyzed through regression analyses. The findings were that "the rates of electronic filling are noticed to be lower in rural communities with low population and with a lower share of females, surprisingly; educational attainment is negatively correlated with e-filing rate and growth in e-filing".

Nasir (2015) conducted a study on implementing electronic tax fillings and payments in Malaysia with the sole objective being to point out the shortfalls of the Manuel system against the gains of maintaining a good electronic tax system. The secondary data employed for the studies were from the Malaysian Inland Revenue report from 2004 to 2011 and trend analysis was used to highlight the increase in tax returns since the adoption of an electronic tax system in 2004. The study finds out that, "for the first two years, the number of taxpayers using the electronic filing system remained far below expectation at about 5% and the tax authorities were still tackling the challenges posed by the new system such as timely and costly adaptation of the system, uncertainty, and security problems, lack of technological exposure in the country, etc. and all of which had little or no impact on tax returns. 2006 to 2011 brought an increase in the users of the system from the disappointing 4% to an encouraging 34% and 37% in 2012, over the same period tax returns increased from 14.5% of GDP to 15.3%. It also showed how compliance was increased and fewer hours used in collecting taxes". The study concluded that electronic systems for filling and paying taxes if implemented well and used by most taxpayers, benefit both the taxpayer and tax authorities and guarantee a better standard of living for all citizens.

Allahverd et al (2017) studied the effect of the electronic taxation system on tax revenue and cost in Turkey. The data used were secondary sources from the Turkish Revenue Authority and were grouped into the pre-electronic tax period of 1993-2004 and the post-electronic tax period of 2005-2016. The method of data analysis was the Mann-Whitney U Test. The study also provided information on the electronic transformation of the tax system and the Turkish Tax System. The findings were that the transition to the electronic tax system positively affected tax revenues and reduced the cost per tax. For Barati and Bakhshayesh (2015) studied the e-tax system and the challenges facing Kermanshah province taxpayers in Iran. The study employed "primary data sourced from questionnaires administered to residents of Kermanshah province with Spearman correlation coefficient, variance analysis, superiority indexes, the agent exploring analysis, structural equations model were employed to analyses data, in which high



sensitivity is used to check their compliance and review. Findings indicate that: technical and infrastructural variables (95/0), social influence (90/0), the expected effort (51/0), legal issues (40/0), expected performance (32/0), information access (18/0) and perceived risk (11/0) are factors of importance and more influence on the affecting factors for the adoption of electronic tax”, respectively.

Ayodeji (2014) looked at the Impact of electronic tax systems on Tax Administration in Nigeria. He argued that the dwindling global fortune occasioned by the fall in the price of crude oil, the major source of wealth for Nigeria shifted the attention of the government and major stakeholders in the country to the revenue generated locally. The daunting task of boosting the internally generated revenue necessitated the adoption of electronic tax systems technologies to drive tax administration and concluded that electronic tax systems play an important role in the increase of internally generated revenue in Nigeria. It is a change agent for accelerated growth and poverty reduction in Nigeria and the African continent at large. The major recommendation from their study was that necessary laws and regulations must be passed by the appropriate authorities to reduce or abolish import taxes on information technology hardware such as computers, Servers, printers, biometric scanners, and other devices.

In a self-assessment mission, the Cross River State Internal Revenue Service 2019 conducted an audit of its revenue effort to compare the pre-e-tax and post-e-tax regimes in Cross River State as contained in the table below. In table 2 and 3 below

**Table 1:** Cross River State Internal Revenue Service: Internally Generated Revenue Trend 2000-2010 Period before Complete Automation and Legal Status; pre- electronics taxation era

YEAR	IRS	MINISTERIAL	TOTAL IGR
2000			245,301,560.69
2001			620,776,409.19
2002	544,329,414.00	596,518,412.00	1,140,847,826.00
2003	456,189,531.00	723,950,741.00	1,180,140,272.00
2004	938,219,527.00	846,274,708.00	1,784,494,235.00
2005	1,071,199,951.00	1,906,975,164.37	2,978,175,115.37
2006	1,549,430,807.00	1,592,073,116.53	3,141,503,923.53
2007	1,721,773,469.34	1,620,102,565.00	3,341,876,034.34
2008	2,501,064,967.42	3,946,910,898.54	6,447,975,865.96
2009	4,456,052,996.47	2,650,239,959.81	7,106,292,956.28
2010	4,971,693,554.24	2,899,248,361.00	7,870,941,915.24

**Source:** Cross River State Internal Revenue Service, 4<sup>th</sup> November 2019

**Table 2: Cross River State Internal Revenue Service: Internally Generated Revenue Trend 2011-2018: Period after 90% Automation and Legal Status; Post-electronic taxation era**

IGR TRENDS FROM 2011-2018													
EAR	JAN.	FEB.	MAR.	APRIL	MAY	JUNE	JULY	AUGUST	SEPT	OCT	NOV.	DEC.	TOTAL
2011	383,322,513.77	446,092,767.91	783,029,427.01	576,596,077.84	638,198,595.03	970,693,412.59	742,930,484.84	796,472,647.91	900,474,488.97	940,918,106.91	728,718,732.39	1,307,204,693.05	9,159,651,948.22
2012	751,633,327.09	912,464,517.60	1,080,477,610.27	1,104,804,013.74	1,001,852,539.27	1,097,067,200.71	1,472,206,594.03	954,352,458.41	1,030,945,643.73	1,263,165,449.57	962,156,056.00	1,103,434,922.92	12,734,560,333.33
2013	1,013,956,281.16	1,148,360,949.30	809,254,158.66	962,573,202.69	1,207,841,656.65	862,909,901.74	826,713,671.04	911,498,225.48	617,310,139.87	896,249,791.47	849,395,735.05	1,896,104,286.46	12,002,167,999.57
2014	1,320,688,575.92	1,261,527,155.61	1,150,320,138.84	1,230,465,378.56	1,125,326,210.41	1,291,513,953.97	1,898,352,090.71	1,127,900,353.35	1,550,676,658.64	1,088,853,257.65	1,150,317,581.65	1,477,766,263.36	15,673,687,648.35
2015	1,190,680,888.32	1,172,204,457.59	1,076,762,678.61	742,380,234.54	1,082,981,558.20	1,356,688,281.23	1,030,331,120.39	1,001,751,087.17	1,010,649,484.28	1,014,460,566.03	1,244,957,076.32	1,228,434,263.36	13,152,281,696.24
2016	1,108,897,406.75	1,069,339,378.51	1,073,136,118.40	1,415,629,703.08	1,162,537,118.09	942,547,404.66	898,474,856.32	788,699,430.70	946,645,790.51	1,089,423,594.98	1,044,159,704.80	3,230,628,305.21	14,770,128,812.01
2017	1,256,621,568.55	1,117,863,665.49	1,214,373,991.84	1,031,519,891.77	1,039,409,166.06	988,195,254.16	1,116,879,732.64	1,018,079,243.49	753,860,271.08	1,633,891,067.27	4,397,627,168.13	2,547,508,915.14	18,104,848,986.68
2018	1,037,419,539.04	1,429,608,087.94	1,296,766,055.55	1,390,572,510.30	3,540,104,747.38	1,055,295,288.82	1,059,569,413.47	1,128,611,252.62	1,030,973,785.26	1,010,825,263.84	1,475,273,591.05	2,089,956,401.82	17,552,105,937.09

**Source:** Cross River State Internal Revenue Service (CRIRS), May 2019

The analysis which covered January to December of the various years shows that there has been significant improvement in internally generated revenue since the complete automation of tax administration and matters connected therewith. The analysis shows that there is a constant but frustrating progression of revenue generation from 2011 – 2019 when compared with the pre-automation era of 2002-2010. Overall, there is empirical evidence that largely utilizing information communication technology in revenue collection leads to increased revenue generation and returns. However, the knowledge and usage of the technology have always been a subject of scholastic debate and investigation to determine, whether people understand the technology and can actively utilize it, in line with contemporary global best practices in revenue generation, administration, and collection.

### Global Best Practices in Taxes Administration

The concept of “best practice” is recent to tax administration and connotes minimum performance standards which every relevant tax authority must comply with, if its mandate must be achieved. In every decision to spend, there is an implicit decision to raise money; therefore, more and more countries adopt rules so that each new investment or expenditure is usually accompanied by a new tax or the increase of an existing one. So, it is necessary to outline what we understand are the best practices to ensure the sustained growth of government revenues, thereby enabling consistent investment in social development, if the institutional strength to spend exists. The term “consistent” should be noticed since achieving qualitative change in many aspects of social development, such as education, health, etc. requires long-term efforts. Both consistency of resource availability and persistence are essential for social investment (OECD, 2006). It further contended that “In our view, three aspects allow for healthy public finances over time to include:

1. The existence of an efficient Tax System that is simple and equitable  
Here, the tax system should involve, amongst others, such principles as adequacy, generality, simplicity, and fairness. Similarly, a proper tax system generates the resources required by the State as established in its design; this usually means establishing a tax burden for all as a common duty of citizens. It is simple if the compliance process and control are clear, and it is fair when everyone pays according to their ability to pay

(horizontal equity) and is treated as equal for all, and unequal for those who are under different circumstances (vertical equity). Along these lines, the principles of generality, simplicity, and fairness are greatly affected by the abuse of tax exemptions and privileges that make it hard for the System to achieve investment objectives, employment, etc. It is not a coincidence that in recent years tax expenditures are considered resources forgone by the State in granting exemptions to goods, services, or sectors. A high tax expenditure is defined as a resource left in the hands of non-state entities to decide where to invest, spend, or not, based on criteria that do not necessarily have to do with the common good or social priorities. In short, society must agree on how to address these issues; whom to tax, and what amount of money to ensure that those who enjoy boom periods pay a fair share.

2. The existence of Fiscal rules for the management of public finances to ensure the rational use of resources and the creation of "countercyclical" funds to maintain social spending levels. Regardless of whether there should be some flexibility in the administration of public finance for governments, especially to resolve short-term issues, fiscal rules aim to achieve financial discipline that allows certain substance; that time of growth, you think should be a time of crisis, that there are caps or limits on indebtedness, control indicators for current expenditure levels, contingency funds, but also which provide indicators for monitoring fiscal management among other aspects. All this can be summarized as formal and informal rules, quantitative and qualitative, to manage fiscal policy prudently, to achieve "fiscal responsibility. The scope and complexity of the rules depend on every country, but all are very important because they impose limits and regulations on budgetary and fiscal policy. In recent years, provisions of this kind, so common in developed countries, have come to Latin America on national as well as State levels clear enough that the first thing is to have resources provided by the Tax System, but then it's also necessary to administer them with fiscal regulations (OECD,2006).

3. A strong Tax Administration capable of implementing the Tax System.

It's a common saying that "a Tax System is only worth the Tax Administration that runs it," regardless of the country. Tax systems are implemented by the work of the Tax Administration. Here, we describe the aspects that constitute best practices for achieving an effective and efficient tax administration. The four key issues that it generally believes are essential and which have been pillars for modernizing Tax Administrations in the last decade to wit: strengthening tax control, improving services, strengthening institutions, and creating fiscally responsible citizens will be discussed.

### **Tax Control**

The primary task for Tax Administrations is to exercise control over taxpayers' behavior to reduce tax evasion, avoidance, and general defaults. Efficient tax control deters tax noncompliance and promotes voluntary compliance. The control over billing and the efficient use of information and communications technologies (ICTs) for fiscal control are the two elements that have characterized the approach of auditing by Tax Administrations in recent decades. Implementing measures designed to control the

release and use of billing invoices has been vital. From control of printers or print media, tax authorities increasingly make use of electronic invoices. Virtually all countries control presses where bills are generated, some of them control billing systems; others implement fiscal printers and electronic invoices. This control facilitates the ability to obtain diverse electronic information.

The use of technology to create databases that manage information on taxpayers that is obtained from other entities has been critical to the modernization of monitoring practices of taxpayers. Computer systems that ensure that more and more taxpayers are reviewed in some way by Tax Administrations for fiscal control are crucial for the increase of awareness about risks, and computer systems that handle management of these revisions are crucial to ensure ethically correct handling of management of these reviews.

Today, ICT represents an indispensable tool for tax administration because the quintessential input for tax administrations is information. Therefore, there is no possibility of preserving good levels of compliance without using technological tools for enforcement. All this explains the fact that planning for tax control involves a plan for using technology. In addition, States are also evolving towards reducing financial opacity that protects tax havens. This issue is of vital importance given that tax havens facilitate tax evasion and avoidance and impede progress toward establishing effective financial regulations. This makes it easier to drain resources from wealth generated in developing countries, which affects the availability of resources in those states. However, others have still been encouraged to quantify tax evasion hidden in tax havens.

In the same vein, in recent years tax control has also expanded into the international realm to achieve greater transparency from certain regulations set for information in tax havens. This has led to the proliferation of agreements to avoid double taxation and agreements to exchange information that facilitate international cooperation in tax control and clarify issues of jurisdiction and tax laws on transfer pricing that already exist in many countries. The 2009 meeting of the G-20 meeting held in London on April 2, 2009, amid the financial-economic crisis that began that year marked the beginning of a new way of approaching the issue of tax havens, abuse of banking secrecy, and others.

### **Facilitate Compliance**

Just as the simplicity of the tax system is important, Tax Administrations are required to facilitate voluntary compliance by taxpayers. Making things easier encourages compliance. In this unit, the ICTs have similarly enhanced intensive use of the Internet to create counters or tax offices, thereby enabling individual and corporate citizens to comply at a lower cost. Contemporarily, almost all modern Tax Administrations have automated the process of e-filing, e-return, e-payments, and related activities while acknowledging the fact that, improving services involves informing the public of all available information channels (print, Internet, social networks, news radio, etc.) continuously and efficiently about the work of the tax authorities and procedures that are related to a citizen taxpayer. Receiving assistance and information in a timely and

appropriate manner is part of the obligation a Tax Administration owes its citizen-taxpayers.

### **Fiscally Responsible Citizenship**

Fiscal education is the strategy of choice in forming a tax culture based on the concept of responsible fiscal citizenship. For this reason, modern Tax Administrations have made tax education programs a priority in recent years. Administrators have proposed to implement training programs for responsible citizens concerning their commitment to society, citizens' ability to exercise their rights, and to meet their tax obligations. It aims to promote tax compliance as an ethical value as well as awareness that tax evasion has harmful consequences for society. It is a way to influence the moral/ethical tax system by referring to standards, and perceptions which determine the honest behavior of citizen-taxpayers regarding their duties to pay tax within the framework of laws and regulations in fiscal legislation.

In a survey conducted by a firm called Ernst and Young in the U.S. and applicable to other countries. Asked the question "How much influence does each of the following issues factor into whether you declare and pay your taxes honestly?" These are the responses of those with the most influence:

- i. Fear of an audit: 64%
- ii. Belief that their neighbors declare and pay honestly: 44%
- iii. Third parties who report their income to the Internal Revenue Service: 66%
- iv. Your integrity: 92% (Deborah Nolan at the 45th CIAT General Assembly, "Tax Morale as a determining factor in improving the effectiveness of the tax administration." 2011 in Ecuador)

In short, it is possible to see that people do feel they have a civic duty to pay taxes. Such surveys have been conducted in other developed countries, even in some Latin American nations, and they demonstrate the importance of working to have fiscally responsible citizens. On this point, the Canadian Revenue (Canada Revenue Agency - CRA-) has identified "responsible citizenship" as an element of a sustainable tax system. "A sustainable tax system is one in which taxpayers believe that paying taxes is a civic responsibility that allows them to enjoy all the rights of a resident or a Canadian."

In a related development, the CRA cites the following sentence by Former Minister Gordon O'Connor of the Tax Executives Institute: "If you're doing business in Canada today, knowingly or not, you are dependent on government services. To be profitable in business, you rely on ... a good infrastructure to bring the product to market, a strong education system to turn to a skilled workforce, and health care to ensure that your employees are physically able to do their jobs. Without these basics, we have no well-functioning State. So, with the interests of our country in mind, we must all do our part". At the corporate level, fiscally responsible citizenship issues have also been addressed with the promotion of concepts such as "corporate social responsibility" which constitutes "corporate self-regulation built into the business model." It is also sometimes called

"corporate conscience, corporate citizenship, social performance, and sustainable responsible business."

Furthermore, the so-called Sarbanes-Oxley law of July 2002 which establishes Controls and Accountability to avoid fraud cover-up in bad accounting and finance, is designed to improve transparency in the actions of corporations, which have a positive impact on complying with tax obligations. In summary, countries that enjoy higher levels of voluntary compliance are those in which citizens show more fiscal responsibility. It is as if a permanent fiscal pact existed to build a better nation.

**Institutional Strengthening**

All the actions described above require institutional strength to achieve management systems that allow human resources to recruit and keep the best people in public service. Consequently, providing Tax Administrations with public servants who are ethically and professionally unobjectionable must be a long-term commitment of all countries. Hence Administrations must be provided with special laws for the management of human resources. Defining the type of people who are required, selecting the best people, creating an appropriate work environment, and providing opportunities for the development of technicians will ensure the permanence of talent necessary for the Tax Administration to operate efficiently and with neatness. To this end, many of the Tax Administrations, especially in Latin America and Africa, have sought budgetary and functional autonomy that allows them to achieve properly planned management. The above discussion speaks volumes of the universal principles for every successful and result-oriented tax administration in its quest to increase the revenue base of their respective countries, Nigerian and Cross River State inclusive.

**Specific Objectives of E-governance and Innovations in Taxes**

Electronic taxation is relatively new in Nigeria and is still evolving as earlier maintained but specific efforts by the FIRS are dated according to Abdulrazaq, (2017), when the FIRS restructured the electronic tax system to operate nationwide by introducing six new electronic tax services (e-services). The available e-services are according to Deloitte Nigeria Blog, available at: <http://blog.deloitte.com.ng/firs-introduces-six-electronic-tax-services>.

**Table 3:** Specifically, there exist significant improvements in the number of persons brought into the tax net due to the innovation brought by e-registration in Cross River State when juxtaposed with the pre-automation era as demonstrated hereunder.

Pre- Automation Era		Post Automation Era	
Year	Number/Volume	Year	Numbers/Volume
2002	37,000	2011	1,397,400
2003	39,000	2012	2,897,64
2004	44,000	2013	3, 448,96
2005	46,774	2014	3,883,99
2006	47,074	2015	4,772,09

**Source:** Researchers Survey, 2019

A cursory look at the table above revealed that the pre-automation period recorded the following transactions 37,000, 39,000, 44,000, 46,774, and 47,074 to cover 2002 to 2006 while, the post-automation era witnessed 1,397,400, 2,897,64, 3,448,96, 3,883,99 and 4,772,09 for the corresponding years of 2011 to 2015 respectively. The implication of the above is that registration of taxpayers increased significantly from the post automation period as well as the consequent increased revenue being the result.

**E-Stamp Duty:** This is for payment of stamp duties on qualifying documents. This innovation will increase the ease of doing business in Nigeria. In the past, physical stamping was required to perform transactions that require stamping. With e-stamping, stamping can be done anywhere and at any time online. One area in which this innovation is very useful is when a new company is being incorporated at the Corporate Affairs Commission (CAC). From the CAC registration site, you can migrate to the FIRS/CRIRS e-service site and pay your stamp duties.

**Table 4:** The above captured improvement is evident in the volume of stamp duty paid in Cross River State between the two periods as captured hereunder.

Pre- Automation Era		Post Automation Era	
Year	Number/Volume	Year	Numbers/Volume
2002	31,100	2011	99, 446
2003	23,675	2012	1,222,44
2004	29,776	2013	1,339,52
2005	31,552	2014	2,532,77
2006	33,444	2015	2,999.74

**Source:** Researchers Survey, 2019

The table shows that the pre-automation periods witnessed the following transactions correspondingly, 2002(31,100), 2003(23,675), 2004 (29,776), 2005(31,552), and 2006(33,444) while significant strides were made from 2011 to 2015 with the following transactions: 99, 446, 1,222,44,1,339,52, 2,532,52, and 2,999,74 respectively, to cover the post automation period. Based on the foregoing, it is safe to conclude that, the volume of transactions increased significantly during e-stamp duty. E-Tax Payment is done of all Federal Government taxes and levies are done through any of the following platforms Nigeria Inter-Bank Settlement (NIBSS), Remita, and Inter-switch. This brings payment of taxes to your doorstep as you can pay your taxes in the comfort of your home. For CRIRS visit <http://www.quickteller.com.ng/crossriver>.

**Table 5:** Electronic tax payment is regarded as the greatest revolution brought by the application of information communication technology in financial administration with monumental consequences as indicates below, in the case of Cross River State.

Pre- Automation Era		Post Automation Era	
Year	Total Revenue Generated #	Year	Total Revenue Generated #
2000	245,301,560.69	2011	9,159,651,948.22
2001	620,776,409.19	2012	12,734,560,333.3
2002	1,140,847,826.00	2013	12,002,167,999.57
2003	1,180,140,272.00	2014	15,573,687,648.57
2004	1,784,494,235.00	2015	13,152,281,696.24
2005	2,978,175,115.37	2016	14,770,812.01
2006	3,141,503,923.53	2017	18,104,848,986.68
2007	3,341,876,034.34	2018	17,552,105,937.09
2008	6,447,975,865.96		

**Source:** Researchers Survey, 2019

The table above indicates a geometric increase in internally generated revenue from #245,301,560.69 in 2000 to #17,552,105,937.09 in 2018. Hence electronic payment has significantly enhanced revenue generation.

**Table 6:** E-Receipt: for receiving and verifying e-receipts generated for taxes paid through the new e-tax payment. With this you receive instant notification acknowledging your payment of tax; it eliminates stress of traveling for receipt as well as the willingness to pay taxes as indicates below

Pre- Automation Era		Post Automation Era	
Year	Number/Volume	Year	Numbers/Volume
2002	36,7020	2011	1,227,101
2003	33,700	2012	1,997,303
2004	33,330	2013	1, 238,752
2005	42, 111	2014	2,111,666
2006	43,221	2015	3,07, 933

**Source:** Researchers Survey, 2019

The advent of electronic receipts alongside other innovations has greatly impacted the volume of transactions and revenue generation in general. The highest transaction in the pre-automation era was 43,221 in 2006 while the least for the post-automation era was 1,227,101 in 2011 and continue progressively to 3,07,933 in 2015 (3,07,993).

E-Filing is done to encourage taxpayers to file their tax returns through the FIRS/CRIRS ITAS online. This is one of the most innovative aspects of e-tax services. It is a mandatory requirement of the law to file tax returns (Section 24 CFRN 1999). This platform obviates



the need to visit any tax office to file tax returns as you can upload relevant documents and file your tax returns electronically. This has brought a significant number of both individuals and legal personalities into the tax net as shown hereunder.

In Cross River state, before the introduction of electronic payment channels for tax payment, filing of returns and objections, assessment, and revenue collection was mired in systemic corruption which led to the diversion of revenue to a few persons. Revenue agents were in the habit of under-declaring the proceeds of revenue gotten from the taxpaying public. This can be seen in the IGR trends as published by the Cross-River State Internal Revenue Service. Before 2011 when e-governance measures for revenue collection were instituted, the highest remittance was N7, 870,941,915.25 in 2010. However, by 2011, revenue continued to scale upwards reaching N18,104,848,986.68 in 2017 because of more efficiency and less manipulation that characterized the manual revenue collection process. A cursory look at the revenue trend obtained from the Cross River Internal Revenue Service also shows a geometric increase in revenues when comparing the period before automation. The data shows that as of 2000, the agency remitted 245,301,560.69, with, the 2010 figure above being the highest. The period after automation recorded N9, 159,651,948.22 as the least remittance.

### **Theoretical Framework**

#### **Diffusion of Innovation (DOI) Theory, by E. Rogers (1962)**

Diffusion of innovations is a theory that seeks to explain how, why, and at what rate new ideas and technology spread. Everett Rogers, a professor of communication studies, popularized the theory in his book "Diffusion of Innovations". Rogers (2003) argues that diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system. Given that decisions are not authoritative or collective, each member of the social system faces his/her innovation decision that follows a 5-step process:

1. Knowledge- the person becomes aware of an innovation and has some idea of how it functions,
2. Persuasion - a person forms a favorable or unfavorable attitude towards the innovation,
3. Decision - person engages in activities that lead to a choice to adopt or reject the innovation,
4. Implementation - a person puts an innovation into use,
5. Confirmation - a person evaluates the results of an innovation decision already made.

The most striking feature of diffusion theory is that, for most members of a social system, the innovation-decision depends heavily on the innovation decisions of the other members of the system. Rogers (2003) argues that after about 10-25% of system members adopt an innovation, relatively rapid adoption by the remaining members and then a period in which the holdouts finally adopt. However, there is still a tendency to have failed diffusion. Failed diffusion does not mean that the technology was adopted by no

one. Rather, failed diffusion often refers to diffusion that does not reach or approach 100% adoption due to its weaknesses, competition from other innovations, or simply a lack of awareness.

Rogers proposes that four main elements influence the spread of a new idea namely: the innovation itself, communication channels, time, and a social system as well as identified five main factors that influence the adoption of an innovation, and each of these factors is at play to a different extent in the five adopter categories.

1. **Relative Advantage:** The degree to which an innovation is seen as better than the idea, program, or product it replaces.
2. **Compatibility:** How consistent the innovation is with the values, experiences, and needs of the potential adopters.
3. **Complexity:** How difficult the innovation is to understand and/or use.
4. **Trainability:** The extent to which the innovation can be tested or experimented with before a commitment for its adoption is made.
5. **Observability:** The extent to which the innovation provides tangible results.

The innovation must be widely adapted to self-sustainability and ease of doing business. Within the rate of adoption, there is a point at which an innovation reaches critical mass. According to Rogers (2003), the categories of adopters are Innovators: These are people who want to be the first to try the innovation. They are venturesome and interested in new ideas. These people are very willing to take risks and are often the first to develop new ideas. Very little, if anything, needs to be done to appeal to this population.

1. **Early Adopters:** These are people who represent opinion leaders. They enjoy leadership roles and embrace change opportunities. They are already aware of the need to change and so are very comfortable adopting new ideas. Strategies to appeal to this population include how-to manuals and information sheets on implementation. They do not need information to convince them to change.
2. **Early Majority:** These people are rarely leaders, but they do adopt new ideas before the average person. They typically need to see evidence that the innovation works before they are willing to adopt it. Strategies to appeal to this population include success stories and evidence of the innovation's effectiveness.
3. **Late Majority:** These people are skeptical about change and will only adopt an innovation that has been tried by the majority. Strategies to appeal to this population include information on how many other people have tried the innovation and have adopted it successfully.
4. **Laggards:** These people are bound by tradition and very conservative. They are very skeptical about change and are the hardest group to bring on board. Strategies to appeal to this population include statistics, fear appeals, and pressure from people in the other adopter groups.

This theory is relevant to the framework of this study. Impliedly and as a concern of taxation, Cross River State can be categorized as a laggard because, since its introduction in 1986, the state could not key into the innovation before other organizations and MDAs.

This theory is relevant to this study as the various elements that influence the spread of a new idea have been considered by the Federal Inland Revenue Services, more especially by involving Nigeria's Inter-Bank Settlement System as a channel through which taxpayers can conveniently pay their taxes.

## **Methodology**

### **Design and study area**

The study employed the descriptive survey research design, oriented towards determining the status of the tax administration system in the Cross River State Internal Revenue Service. The survey essentially describes and interprets how the tax administration system exists at present. This design can lead to investigation and scientific interrogation of the phenomenon as it occurs without attempting to control or manipulate it, while also aiding the researcher to appropriately describe the variables under study.

### **Study Population**

The population of the study consists of 498 staff of the Cross River State Internal Revenue Service (CRIRS). This population is according to data supplied by the agency (CRIRS, 2022). Accordingly, there are 313 permanent staff and 185 temporary staff of which male to female ratio reads; thus, permanent staff male = 60%, females = 40%; temporary staff, male = 65.4%, females = 34.6%; Senior staff = 93% while junior staff = 7%. The researcher got interested in this area because it is the only agency in the state that has the statutory responsibility of administering and collecting tax revenues and in which e-governance practice is generally noticeable.

### **Sample and Sampling Technique**

The technique employed in selecting the sample size for the study was the purposive sampling technique. The purposive sampling technique is a non-probability or random sampling technique that relies on the judgment of the researcher in selecting a sample for the study. In applying the Taro Yamane formula, the researcher selected staff that have had at least five years of working experience with the organization. The researcher also evenly spread out the sample between the senior and junior staff, male and female. Taro Yamane formula was applied to the population to determine the sample size for the study. Based on the Taro Yamane formula, the sample of the study consists of 222 staff of the Cross-River State Internal Revenue Service (CRIRS). The formula is expressed thus:

$$n = \frac{N}{1 + N(e)^2}$$

Where;

n = Sample size

N = Population of the Study

E = Degree of error; that is 0.05

By substitution, we have

$$\begin{aligned}
n &= \frac{498}{1+498(0.05)^2} \\
n &= \frac{498}{1+498(0.0025)} = \\
&= 498 (0.0025) = 1.24 +1= 2.245 \\
&= \frac{498}{2.245} = 221.82
\end{aligned}$$

Approximately = 222

### **Ethical consideration and administration of instruments**

The study got institutional consent and ethical approval from the Ethical Board of the University. Relevant information regarding the objectives and significance of the study was made known and informed consent was equally obtained from all study's participants before they were enrolled in the study. Before administering the questionnaires, participants were briefed on the purpose of the study and were made to understand that participation was optional and should be out of one's volition. Participants were made to understand that their responses were going to be treated with utmost confidentiality and that the responses provided would be treated as their opinions regarding the questions. The researcher was assisted by the Director of the Agency who helped in allay the fears of the participating staff and enlist their permission to provide the needed responses.

### **Method of data analysis**

The study utilized descriptive analysis that is, the simple percentage in presenting the socio-demographic information of respondents while hypotheses were tested using Pearson Product Moment Correlation (PPMC). The study employed a paired sample *t*-test otherwise known as the posttest as a data analysis technique. Paired sample *t*-test is a statistical procedure used to determine whether the mean difference between two sets of observations is zero. In a paired sample *t*-test, each subject or entity is measured twice, resulting in *pairs* of observations. The appropriateness of this method can be justified by the fact that each variable was grouped into two observations (before e-taxation implementation and after e-taxation implementation). All analysis was electronically computed using the Statistical Package for Social Sciences (SPSS) version 20.

## **Results**

### **Respondents' socio-demographic data**

There was a total of 222 survey instruments administered to the sampled staff of Cross River State Internal Revenue Service. Out of which 221 were retrieved. Data obtained shows that most of the respondents representing (54.8%) are male staff of the Agency and most of them are between the ages of 28-37 representing (45.7%) while those who are married represent (65.6%). Among the respondents (63.3%) are said to have completed their higher education. And those with the highest years of service represent (44.3%) have spent 6-10 years. The result further reveals that the Agency is dominated by a senior staff cadre representing (71.5%).

**Data in Table 7** shows a greater percentage of respondents (95%) knowing the use of e-governance in tax administration in Cross River State. With this result, it is believed that an overwhelming majority of the respondents in the study know the use of e-governance in tax administration.

**Table 7:** Percentage distribution of respondents on the use of e-governance on tax administration in Cross River State

Knowledge of the use of e-governance	Frequency	Percentage (%)
Yes	210	95
No	12	5
<b>Total</b>	<b>222</b>	<b>100.0</b>

**The efficacy of e-governance on the cost of tax administration in Cross River State**

Results in Table 8 show the percentage distribution of respondent's responses to e-governance and cost of administration, in internally generated revenue in Cross River State. The first item in this sub-section on whether "E-payment and assessment reduce the number of personnel required for tax collection compared to manual collection" shows that 99 (44.8%) respondents of the total sampled strongly agree with the question. 84(38.0%) respondents agreed, 22(10.0%) respondents disagreed while 16(7.2%) respondents responded strongly disagree respectively. The second item on whether "E-filing, receipt and stamp duty eliminate the cost of paperwork needed under the manual revenue collection" it's discernable that 97(43.9%) respondents strongly agreed, 90(40.7%) respondents agreed, 18(8.1%) respondents disagreed while 16(7.2%) respondents responded strongly disagreed.

The third item on whether "E-payment and receipt system makes auditing of financial records easier and cost-effective" it was revealed that 122(55.2%) respondents strongly agreed, 78(35.3%) respondents agreed, 13(5.9%) respondents disagreed while 8(3.6%) respondents strongly disagreed categorically. The fourth item on whether "The cost of maintaining a revenue collection website is expensive" shows that 94(42.5%) respondents, 76(34.4%) respondents, 32(14.5%) respondents, and 19(8.6%) respondents strongly agreed, agreed, disagreed, and strongly disagreed respectively. The last item on whether "E-payment platforms are prone to cyber-attacks and internet fraud" it's revealed that 91(41.2%) respondents strongly agreed, 62(28.1%) respondents agreed, and 43 (19.5%) respondents disagreed with the questionnaire item while 25(11.3%) respondents strongly disagree simplicity.

**Table 8:** Responses to E-governance and cost of tax Administration in Cross River State

S/N	ITEMS	SA	A	D	SD
1	E-payment and assessment reduces the number of personnel required for tax collection compared to manual collection	99 (44.8%)	84 (38.0%)	22 (10.0%)	16 (7.2%)
2	E-filing, receipt and stamp duty eliminates the cost of paperwork needed under the manual revenue collection	97 (43.9%)	90 (40.7%)	18 (8.1%)	16 (7.2%)
3	E-payment, and receipt system makes auditing of financial records easier and cost effective	122 (55.2%)	78 (35.3%)	13 (5.9%)	8 (3.6%)
4	The cost of maintaining revenue collection website is expensive	94 (42.5%)	76 (34.4%)	32 (14.5%)	19 (8.6%)
5	E-payment platforms are prone to cyber-attacks and internet fraud	91 (41.2%)	62 (28.1%)	43 (19.5%)	25 (11.3%)

Source: Researchers Survey, 2020

**Cross-tabulation of Data**

The three independent demographic variables of the respondents as used in the study namely, occupation, education, and gender (sex) were cross-tabulated with the dependent variable of e-governance. Pearson Product Moment Correlation statistic was utilized to determine whether there is any significant relationship between the variables under study. In achieving this, some data were re-coded for ease of understanding.

**Cadre**

It must be established here that in the review of literature, there was no place that anything has been mentioned about the relationship between cadre and knowledge of the use of e-governance in tax administration. Therefore, the researcher deemed it necessary to interrogate the influence of e-governance on tax administration.

**Table 9:** Descriptive statistics table showing mean and standard deviation for Cadre and knowledge of the use of E-governance in tax administration.

Descriptive statistics			
	Mean	Std. Deviation	N
Cadre	17.9910	1.10368	221
E-governance	15.2443	2.28115	221

Source: Researcher`s Survey, 2020

**Table 10.** Distribution of respondents by cadre and knowledge of the use e-governance in tax administration

		Correlations	
		Cadre	E-governance
Cadre	Pearson Correlation	1	.055
	Sig. (2-tailed)		.415
	N	221	221
E-governance	Pearson Correlation	.055	1
	Sig. (2-tailed)	.415	
	N	221	221

Correlation is significant at the 0.05 level (2-tailed).

Results in tables 9 and 10 show the correlation analysis of cadre and knowledge of the use of e-governance in tax administration. The results indicate that the correlation coefficient is 0.415. Having the mean and standard deviation of 17.99 and 1.10 as well as 15.24 and 2.28, therefore, the result is statistically significant. This result implies that there is a composite relationship between cadre and knowledge of the use of e-governance in tax administration. In other words, the relationship between these variables is direct with the former exerting direct influence on the latter.

**Education**

**Table 11:** Descriptive statistics table showing mean and standard deviation for Education and knowledge of the use of E-governance in tax administration.

**Descriptive Statistics**

Variables	Mean	Std. Deviation	N
Education	17.9910	1.10368	221
E-governance	16.0995	2.95559	221

**Source:** Researcher`s Survey, 2020

**Table 12:** Distribution of respondents by education and knowledge of the use of e-governance in tax administration

		Correlations	
		Education	E-governance
Education	Pearson Correlation	1	.073
	Sig. (2-tailed)		.282
	N	221	221
E-governance	Pearson Correlation	.073	1
	Sig. (2-tailed)	.282	
	N	221	221

Correlation is significant at the 0.05 level (2-tailed)

Results in tables 11 and 12 show the correlation analysis of education and knowledge of the use of e-governance in tax administration. The results indicate that the correlation coefficient is 0.282 with the mean and standard deviation of 17.99 and 1.10 cum 16.09 and 2.95, thus the result is statistically significant. This implies that there is a positive correlation between education and knowledge of the use of e-governance in tax administration.

**Gender**

**Table 13:** Descriptive statistics table showing mean and standard deviation for Gender and knowledge of the use of E-governance in administration.

**Descriptive Statistics**

Variables	Mean	Std. Deviation	N
Gender	17.9910	1.10368	221
E-governance	15.9095	3.17532	221

**Source:** Researcher`s Survey, 2020

**Table 14:** Distribution of respondents by education and knowledge of the use of e-governance in tax administration

**Correlations**

Variables		Gender	E-governance
Gender	Pearson Correlation	1	.133
	Sig. (2-tailed)		.048
	N	221	221
E-governance	Pearson Correlation	.133	1
	Sig. (2-tailed)	.048	
	N	221	221

Pearson correlation is significant at the 0.05 level (2-tailed).

Results in Tables 13 and 14 show the correlation analysis of gender and knowledge of the use of e-governance in tax administration. The results indicate that the correlation coefficient is 0.133 with the mean and standard deviation of 17.99 and 1.10 as well as 15.90 and 3.17, therefore, the result is statistically significant. This implies that there is a positive correlation between gender and knowledge of the use of e-governance in tax administration.

**Discussion**

In Cross River state, before the introduction of electronic payment channels for tax payment, filing of returns and objections, assessment, and revenue collection was mired in systemic corruption which led to the diversion of tax revenues into the hands of a few individuals. Revenue agents were in the habit of under-declaring the proceeds of revenue gotten from the taxpaying public. This can be seen in the IGR trends as published by the Cross River State Internal Revenue Service. Before 2011 when e-governance measures for revenue collection were instituted, the highest remittance was N7, 870,941,915.25 in 2010.



However, by 2011, revenue continued to scale upwards reaching N18,104,848,986.68 in 2017 because of more efficiency and less manipulation that characterized the manual revenue collection process. Data on the knowledge of the use of e-governance in tax administration showed a positive correlation as respondents agree that staff cadre, education, and gender have proven the efficacy of e-governance in administering tax revenue in Cross River State. The finding is in tandem with the study conducted by Nkanor and Udu (2016) when they stated that, it was the weakness of manual collection of revenue that led to the integration of information and communication technology in the internal revenue collection process. Manual collection of revenue was plagued by incidents which mainly included sharp practices by revenue collection officials.

Similarly, Sani (2013) conducted a study that yielded a similar result, that e-governance was positively related to increased revenue generation. The position of that study was based on evidence that e-governance corrected most of the deficiencies which were obtainable in the manual collection of revenue system and that since its introduction; there have been significant increases in the revenue collected by the revenue collection agencies. Nasir (2015) carried out an extensive study to show the importance of electronic governance in the manual revenue collection process. The findings of that study conform with the results of this study which reads in part, that if properly maintained, efficiently deployed, and effectively managed, electronic system of filing and tax collection and payment tends to benefit both the taxpayers and tax authority in varying degrees, hence increased standard of living for the citizenry.

Most importantly, one major gain of e-governance is that it blocks all avenues for tax evasion. Tax evasion was the major problem of the tax system before the advent of e-governance as many private individuals and organizations were in the habit of avoiding tax payments. A significant increase in tax remittance during the e-governance era implies that the automated nature of taxation now has blocked all routes for tax evasion. This finding was reiterated by Stephen et al (2017) as they asserted in their study on the role of e-governance in Nigeria's tax system. The study revealed that implementing e-governance as a way of ensuring tax compliance can serve as a key to increasing revenue. E-governance has improved revenue reforms and has ensured that all leakages that drain revenues were promptly plugged. Thus, with the advent of e-governance, the size of internally generated revenue rose considerably.

### **Conclusion and Recommendations**

This study was carried out with the intent to evaluate the impact of e-governance on the administration of taxes in the Cross River State Internal Revenue Service. Based on the findings of the study, it was discovered that e-governance processes were yielding results in terms of boosting tax revenues as well as building confidence in users of the system. The first result of the study indicated that e-governance led to significant increases, in efficient and effective administration of the tax system and revenue profiling and assessment in Cross River State. The survey results indicated that since the introduction of e-governance processes in Cross River State such as e-filing of tax returns there has

been an increase in revenue generated orchestrated by increased capturing of eligible revenue/taxpayers since automation of the processes began in 2011. The study maintained that this trend can be associated with e-governance. The study further reiterated that e-governance led to increased transparency in internally generated revenue. This indicated that e-governance processes were open and increased the confidence of the users of the system. Survey results had shown that part of the e-governance process involved publishing financial information regularly inter alia. This was made possible through e-governance otherwise termed "Automation".

Furthermore, the study emphasized that e-governance led to reduced cost of administration. It was established that e-governance drastically reduced the cost of collating tax information as well as collecting the actual tax and revenue from taxable individuals and businesses. E-governance eliminated the use of manual tax collection procedures and reduced the level of paperwork. This drastically reduced operating costs for the Cross State River Internal Revenue Service and Cross River State Government by extension.

These conclusions provide the basis to recommend the need for the government of Cross River State and the Nigerian state at large to adopt and strengthen the framework of electronic tax administration. This will require improved technology and frequent staff training with new innovative operational skills.

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