The Effect of Information Communication Technology (ICT) on Revenue Generation in Gombe State Internal Revenue Service

Prof. Mahmoud Umar
Usman Bappi
Cleobas James
Department of Public Administration
Gombe State University, Nigeria
Email: ubappi0013@gsu.edu.ng, usmanbappi@gmail.com
Phone: 08036585832, 09041412235

Abstract
This study examined the effect of Information and Communication Technology (ICT) on revenue generation in Gombe State Internal Revenue Service to find out if the application of ICT increased the efficiency of revenue collection. The theory adopted for this study was the Technology Acceptance Model (TAM). The research design used was survey research in which information was gathered from a sample of respondents. The total population of the study was 98 staff of Gombe State Internal Revenue Service who constituted the sample size of the study. The questionnaire was administered using a simple random sampling technique. Data were analysed using average mean score, while the hypotheses were tested using Analysis of Variance (ANOVA) with the aid of Statistical Package for Social Sciences (SPSS). The findings of the study revealed that there is a significant difference in mean between the availability of ICT Infrastructure and an increase in Revenue Collection; that there is a moderate positive relationship between ICT availability and revenue generation in Gombe State Internal Revenue Service; and that there is a correlation Coefficient for the relationship between the introduction of ICT and the ease of doing business in Gombe State Internal Revenue Service. The study recommended, among others, that Gombe State Board of Internal Revenue should ensure an improved ICT infrastructure which includes completion of the fibre-optic network project, provision of adequate computer systems and reliable UPS to all offices for staff.

Keywords: Information and communication technology (ICT), revenue, revenue generation, revenue collection.

Introduction
Information Communication Technology (ICT) has become an integral part of modern governance and economic systems, playing a pivotal role in transforming traditional processes across various sectors. In the context of revenue generation, the adoption of ICT tools has been widely acknowledged for its potential to streamline processes, enhance efficiency, and improve overall revenue collection (Ouda, 2017). The importance of revenue to any government cannot be overemphasized. Although the traditional responsibility of the Government is the maintenance of law and order, the era where the government merely carried out the responsibility of protection of lives and property alone is over. The generation of revenue and its sustainability is of paramount interest to managers in both private and public sectors (Agwa & Odundo, 2018)), because they cannot carry out any activity without financial implications. In other words, managers require resources to carry out their duties. These resources come from revenue, therefore, heads of every establishment ensure that there are adequate sources and methods of collecting revenue to achieve set goals/objectives.

In Nigeria, revenue generation has been faced with sundry challenges which negatively impact revenue generation in the country. According to Igbinigie (2018), the continuous decline in the price of crude oil as well as oil theft and vandalism has led to a decrease in the funds available to the Federation Account Allocation Committee (FAAC) and its concomitant consequences to the benefiting tiers of government in Nigeria, since the country depends heavily on revenue from oil. To this effect, the need for states in Nigeria to generate adequate revenue from internal sources to meet their financial obligations has become a matter of extreme urgency and importance (Nto, 2016). According to Igbinigie (2018), this is so given the ever-increasing cost of running the government, coupled with the dwindling revenue from the Federation Allocation Account. According to Nto (2016), the need for the government to provide social amenities, embark on developmental projects that would improve the living standard of her citizenry as well and meet its overhead or recurrent expenses necessitated enhanced internal revenue generation efforts.

Before the introduction of ICT in revenue administration, the Nigerian revenue collection systems were conducted manually which was associated with setbacks such as tax evasion, tax avoidance and other corrupt practices, leading to losses of huge revenue by the Government, hence less revenue generation (Okoye & Ezejiofor, 2014). These activities were considered as sabotaging the economy and readily presented as reasons for the under-development of the country (Adedeji & Oboh, 2012).

Governments the world over are increasingly recognizing the need to facilitate access to public services through information exchange using Information and Communication Technology (ICT) (Dimlong, 2016). The role of Information and Communication Technology has been growing in the economic and social life of the 21st century, thus, it has become very important to national growth and development. In fact, with the advent of Information and Communication Technology, it became imperative for tax administrators to take advantage of the technology.

The Gombe State Internal Revenue Service is the agency primarily charged with the responsibility of assessing, collecting and accounting for various revenues for the state. It is saddled with the responsibility of collecting all forms of revenue due to the state. Several studies have highlighted the positive effects of ICT adoption on revenue generation within government agencies (Smith, 2019; Rahman & Hossain, 2021). These effects include improved data accuracy, faster transaction processing, enhanced taxpayer compliance, and increased transparency in financial transactions. However, it is essential to recognize that the effectiveness of ICT implementation can vary based on the specific context and organizational structure, making it imperative to investigate its impact within the unique framework of the Gombe State Internal Revenue Service. Moreover, as technology evolves, there is a need to assess the current state of ICT infrastructure and utilization within GSIRS and identify potential areas for improvement. Understanding the challenges and opportunities associated with ICT implementation in the revenue generation process will contribute to informed policy decisions and strategic planning for the GSIRS.

Statement of the Problem
Over the years, revenue generation in Gombe State was abysmally poor, making the state depend heavily on statutory allocation from the Federal Government. This meant that the state could hardly meet its responsibilities as a government if funds coming from the Federal Accounts Allocation Committee (FAAC) should fail, this is because revenue generation at the state level had been plagued with several limiting factors such as weak administrative lapses as evidenced in manual compilation and documentation of all revenue services and taxpayers. Manual compilation involves the use of files or folders for database storage which has the potential for lack of adequate records and making retrieval a herculean task. Because of the

porosity inherent in this method of documentation, situations such as tax evasion, tax avoidance, corruption and mismanagement on the part of the tax collection officials are eminent. This practice has the potential to hinder the state government from accomplishing its economic goals because only a small amount of revenue is realized as a result of the adoption of inappropriate measures and inefficiency in the system. It is against this backdrop that this study seeks to examine the effect of Information Communication Technology (ICT) on revenue generation with specific reference to the Gombe State Internal Revenue Services.

Objectives of the Study
The general objective of the study is to assess the impact of ICT on revenue generation in Gombe State. However, the specific objectives are to:
i.   To examine the relationship between the introduction of ICT and revenue generation by Gombe State Internal Revenue Service.
ii.   To establish the relationship between the introduction of ICT and ease of doing business by Gombe State Internal Revenue Service.

Research Hypotheses
The hypotheses formulated to guide the study are:
Ho: There is no significant relationship between the introduction of ICT and increased revenue generation in Gombe state Internal Revenue Service.
Ho: There is no significant relationship between ICT and ease of doing business in Gombe state Internal Revenue Service.

Literature Review
a.   The Concept of Information Communication Technology (ICT)
Ebijimo (2005) cited in Oyemarizu and Ogunjobi (2011) defined Information and Communication Technology (ICT) as a tool used for collection, processing, transmission and dissemination of information. It is an extensional term for Information Technology (IT) which stresses the role of unified communications and integration of telecommunication (telephone lines, and wireless signals). ICT is therefore a broad and evolving concept. The term covers any product that can store, retrieve, manipulate, transmit or release information electronically in a digital form e.g. personal computer (CP), digital television, email, robots etc.

Okaru (2010) defines ICT as the digital processing and utilization of information by the use of electronic computers. He added that it consists of the storage, retrieval, conversion, and transmission of information. His definition corroborates the previous one. In other words, both definitions emphasize that ICT involves how information is electronically processed, transmitted, manipulated, stored and retrieved using electronic devices such as PCs, mobile phones, tablets, printers, hard disks, flash drives, etc. ICT can simply be defined as the combination of digital processing and electronic communication of information. Computers are used to process and store data while communication technology provides information communication tools which make it possible for users to access databases and link them with other computer networks at different locations (Onyemaizu & Ogunjobi, (2011). Olaoye (2017) identifies three components of ICT, that is, Hardware, Software and Network. According to his definition, ICT consists of tools, devices and resources used to communicate, create, manage and share information. This includes Hardware (computers, modems, mobile phones etc), Software (computer programs, applications etc.) and networks (wireless communication, internet). Mary & COX (2007) cited in Dimlong (2016) define ICT as electronic and computerized devices associated with human interactive materials that enable users to use them for a wider range of service delivery and personal use. In this definition, the need for human

interference is obvious as there is the need for assemblage of all these hardware, software and networks for them to interact.

b.   The Concept of Revenue

Revenue, according to Ahmed (2010), is defined as all amounts of money received by a government from external sources, for example, those originating from 'outside the government' net of refunds, sale of investment, proceeds from issuance of debt, agency or private trust transaction and intra-governmental transfers. Obiechina (2010) posits that the financial earnings of the government, include the bulk of its revenue and this is related to monies mobilized or generated in the economy. Ilyas & Siddiqi (2010) state that public revenue consists of taxes and revenue from administrative activities which include fines, fees, gifts and grants. These can be classified into two, namely: tax and non-tax. Ihendinihu, Ebieri & Ibanichuka (2014) submit that government revenue is of two types: oil and non-oil. Oil is the main source of revenue accruing to the federation account, including revenue from crude oil and gas exports, receipt from petroleum profit tax and royalties, and revenue from domestic crude oil sales. Non-oil revenue is revenue which is not associated with oil.

According to Chaudhry & Munir (2010), these include custom and excise duties, company tax, capital gain tax, value-added tax., fines and penalties, surplus from public enterprises, levies, grants, gifts and deficit financing. Revenue generation in Nigeria is principally derived from taxes and non-tax sources or oil and non-oil sources. Tax is a compulsory levy imposed by the government on goods, services and income of individuals and companies for the various legitimate functions of the government (Olaoye, 2008). When the compulsory levy is on the income of individuals and corporations, it is called direct taxation, whereas, when the compulsory levy is on goods and services, it is referred to as indirect taxation. In the same vein, Muhammad et al. (2011) note that in the majority of developing and developed countries, tax is the greatest contributor to Government revenues which are mainly utilized to meet the cost of expenditure by the Government including providing social services, infrastructure development, education and health services. In addition, most governments in developing nations routinely run budget deficits because tax collection is insufficient to cover soaring government spending. This means that the Government has to finance the budget deficit with a debt or simply reduce its expenditure.

c.   Information Communication Technology (ICT) and Increased Revenue Generation

Revenue generation is the nucleus and the path to modern development. The need for governments at all levels to generate adequate revenue from internal sources to augment the continued shrinking revenue from the Federation Account (in the case of Nigeria) has thus become a matter of extreme urgency and importance. This need underscores the eagerness on the part of governments to look for new sources of revenue or to aggressively pursue policies and reforms that improve the mode of collecting revenue from existing sources. This revenue is what is referred to as Internally Generated Revenue (IGR). Revenue accruing to the government comes from different sources. It could come from transactions such as sales of goods and/or services, statutory allocations, aids and donations, grants, taxes, fines or levies. The various sources of revenue available to state governments in Nigeria, according to Asimiyu & Kizito (2014) include taxes, fines and fees, licenses, earnings from sales, rent of government property, interest and dividends, among others. Central to internal revenue generation in many states, especially among the northern states, is taxation. These states generate a larger proportion of their revenue from taxes. The challenge facing these governments is the inability to generate revenue, even from the existing sources, maximally. To address this problem, states employ different strategies and methods as well as reforms to enhance their ability to generate more revenue.

Introduction of Information Communication Technology otherwise referred to as revenue automation has become the bride of governments at all levels the world over. African countries, including Nigeria, are not left out in adopting technology in their revenue administration. The United Nations Conference on Trade and Development (UNCTAD) in 2006 emphasized that an automation technology-based approach to revenue collection will help governments achieve substantial revenue collection that would help them in terms of meeting the expectations of the citizens. Sani (2009) opines that by automating revenue collection, service providers have a better audit trail since all transactions captured can be detailed by the time the transactions are taking place, who performs the transactions, and where such transactions are carried out. He maintains that this prevents revenue losses through abuses as all moves are recorded electronically.

Research conducted by Gidisu (2012) on the automation system procedure of Ghana Revenue Authority on the effectiveness of revenue collection at the Customs Division found that 100% of the respondents, who were staff of Ghana Revenue Authority (GRA), agreed that automation of revenue collection increased revenue mobilization in the operations of Ghana Revenue Authority. Chatama (2013) conducted a study to determine the impact of ICT on taxation. His case study was the Large Tax Department (LTD) of the Tanzania Revenue Authority. The study was mainly to examine how the introduction of ICT modernized the tax administration procedures and improved revenue collection at the Large Tax Department of the Tanzania Revenue Authority. The findings of the study showed that the introduction of ICT brought about timely access to records, fast processing of returns since all data are captured on the system which has removed postal delays, minimal operational cost as there is no longer a large pool of clerks, reduced errors since information is not processed manually but automated, plugged revenue losses resulting to higher revenue generation. Also, Afumboade (2014) investigated how ICT impacts tax administration in Nigeria. Research findings revealed that ICT plays an important role in the increase of internally generated revenue in Nigeria by ensuring compliance, thereby boosting productivity.

The Gombe State Internal Revenue Service formerly known as the Board of Internal Revenue is the main agency of Gombe state government saddled with the responsibility of assessing taxpayers, enforcing tax laws, and collecting all forms of tax due to the government. It is a statutory agency of government established by Edict No. 6 of 1997 following the creation of Gombe state in 1996 by the then-military administration of late General Sani Abacha (Gurama & Mansor, 2015). The edict that established the agency is in tandem with decree no. 104 of 1993 which aimed to unify tax administration in the country. The decree empowers states to establish boards as the key policy-making bodies for internal revenue generation for both states and the federal government.

Over the years it has been collecting and processing revenue and issuing receipts and Tax Clearance Certificates manually. The total revenue realized each year has been very low and dwindling, thereby, making the state heavily dependent on allocations from the Federation Allocation Accounts Committee (FAAC). The sources of revenue or particulars of revenue available to the state include taxes (direct and indirect), fines and fees, licenses, earnings from sales and services rendered by the government through its investments such as hotels, public transport outfits, etc., rent on government property such as shops, repayments, interest, dividends and reimbursements. These sources, despite their potential, have proven ineffective in adequate revenue generation for the government over the years. Following the urgent need to increase the revenue base of the state several, reforms were introduced by different governments among them is the introduction of ICT to automate all revenue collections in the state. This followed the discovery by relevant stakeholders that there were leakages in the system, gross inefficiency, high cost of revenue collections and poor & slow processes and documentation that resulted in low annual revenue generation by the state which needed an

urgent solution (Gurama & Mansor, 2015). The Gombe State Internal Revenue Central System (GICS) was established in November 2016 to block those perceived leakages, improve its efficiency, reduce cost, increase the revenue sources and number of taxpayers on the system and enhance the revenue generation by the state.

Before the automation of the revenue system, the state had about 3,000 taxpayers officially registered. With the automation, the Gombe State Internal Revenue Service (GSIRS) targeted to register 100,000 taxpayers within and outside the state who have their tax obligations in the state. Before the end of 2016, GSIRS had registered 9,000 taxpayers (a figure three times higher than the total number of taxpayers registered by the state manually before automation) on its GICS. Presently, there are 35,000 taxpayers registered on GICS who are assigned a Gombe State taxpayer`s Identification Number (GTIN). It is an electronic number that uniquely identifies a taxpayer (individual or corporate) to the Gombe State Government and Gombe State Internal Revenue Service (Gombe State Revenue Codification and Consolidation Gazette, 2021).

d.   Information Communication Technology (ICT) eases the burden of transactions by both revenue officials and citizens.

Managers now realize that information technology can be used as an engine to speed up processes, eliminate or reduce paperwork, increase the quality of output and service delivery, decrease storage costs, and enhance information sharing and communication. They also realize that they have to achieve not only management/staff-wide computer literacy, i.e. knowing how to locate, analyze, store and use information, but all staff in modern organizations need to be able to search and gather data from different sources, analyze them, select the relevant ones and organize them in such a manner as to allow them to make decisions based on the information (Mahmoud et al., 2014).

In advanced countries such as the United States of America, the Internal Revenue Service relies on taxpayers to comply with the law and voluntarily calculate and pay their taxes. The agency also monitors tax evasion, instances in which people or corporations illegally avoid paying some or all of their required income taxes. The IRS may audit (check for accuracy and compliance in payment) anyone they suspect of tax evasion by requesting complete records of all earnings and expenses (Jamala, et al, 2013). In Nigeria, Ola (2004) states that the taxpayer is issued with the income tax return form for his or her completion. It is a return of income claims for allowances and reliefs. The law requires that the annual return of income (forms) should reach the taxpayer between 1st January and 28th February, otherwise, the taxpayer should demand one.

Theoretical Framework

This study adopts Technology Acceptance Model (TAM) as the basic and relevant theoretical underpinning for this study. TAM was developed by Fred Davis (1989), and it was adopted from the theory of Reasoned Action (TRA) by Ajazen & Fishbein (1980). It suggests that an individual's information systems acceptance is determined by two major variables, perceived usefulness and perceived ease of use.

Davis defined perceived usefulness as the prospective user's subjective probability, that using a specific application system will enhance his or her job or life performance. He defined perceived ease of use as the degree to which the prospective user expects the target system to be free of effort (Priyanka, 2012). According to TAM, ease of use and perceived usefulness are the most important determinants of actual system use.

These two factors, according to TAM are influenced by external variables. The main external factors that are usually manifested are social factors, cultural factors and political factors. Social factors include language skills and facilitating conditions. Political factors are

mainly the impact of using technology in politics and political crises. The attitude to use is concerned with the user's evaluation of the desirability of employing a particular information system application. Behaviour is the measure of the likelihood of a person employing the application.

TAM is relevant to this study because it focuses on the factors influencing user acceptance of technology. In the context of the Gombe State Internal Revenue Service (GSIRS), understanding how tax officials and employees perceive the ease of use and usefulness of ICT tools can be critical. TAM can help identify potential challenges and facilitators to the adoption of ICT in revenue-related processes. Also, TAM emphasizes the importance of perceived ease of use and perceived usefulness in determining user acceptance. Applying TAM to the study can help assess how tax officials in Gombe State perceive the ease with which they can use ICT tools for revenue collection and how useful they find these tools to enhance their efficiency. Also, TAM's insights can inform policy decisions and strategic planning for the GSIRS. If the study reveals positive perceptions of ICT tools, policymakers can leverage this information to develop strategies for wider adoption. On the other hand, if challenges are identified, the findings can guide targeted interventions to address specific issues. This in turn influences the behaviour of the government to adopt the system and put it to use.

Research Methodology

The researcher adopts a survey method in which information is obtained from a sample of respondents. For this study, the researcher obtained data from both primary and secondary sources. The primary sources of data included data collected from the field using questionnaire and interviews while the secondary sources of data included publications by the National Bureau of Statistics, literature from the Gombe State Internal Revenue Service, scholarly articles, textbooks, magazines, pamphlets, unpublished research works and other relevant literatures. The population comprises the staff of the Gombe State Internal Revenue Service. The Gombe State Internal Revenue Service has a total Staff strength of ninety-eight (98) persons. The researcher used the entire population size because the number was too small to take a sample size, therefore, the sample size was ninety-eight (98) staff members of the Gombe State Revenue Service.

For this study, the researcher adopted the simple random sampling method for questionnaire administration. This is because the technique provides room for every member of the population to stand a chance of being selected. The researcher employed both quantitative and qualitative methods of data analysis. Two types of data analysis were carried out on the data that was collected as follows: descriptive data analysis method which uses frequency tables, while hypotheses were tested using Analysis of variance (ANOVA), using Statistical Package for Social Science (SPSS).

Data Presentation and Analysis

Data collected for this study were analyzed using frequency and percentages as well as Mean and standard deviation. Only responses from 91 copies of questionnaires completed and returned by Staff of Gombe State Revenue Service were analysed in the study. Given that, all the questions were measured according to a 5-point Likert scale, in the analysis, a mean equal of 2.5 was considered as the cut-off point. This indicated that if the mean value of a statement or construct is greater than 2.5, respondents had a positive perception towards this statement, in other words, (agreed) while if the mean value of a statement is 2.5 or less, respondents had a negative perception towards this statement (disagreed). A mean score close to 5 indicates strongly agreed while a mean score close to 1 indicates strongly disagreed.

Analysis of Objective One

Table 1: Mean and standard deviation of Staff of Gombe State Board of Internal Revenue on the availability of ICT infrastructure and increase in revenue collection in Gombe State Board of Internal Revenue

	Item Statements	N	Mean	Std. Deviation	Decision
1	There are adequate Personal Computers for staff of Gombe State Internal Revenue Service?	92	3.61	1.027	Agree
2	ICT infrastructure (computers, scanners, printers, internet facility, websites, emails, etc.) are available for staff in the office.	92	3.88	.936	Agree
3	ICT infrastructure (computers, scanners, printers, internet facility, websites, emails, etc.) are regularly maintained.	92	3.65	1.152	Agree
4	The financial resources allocated for ICT development and maintenance at the Gombe State Internal Revenue Service is sufficient.	92	3.22	1.078	Agree
5	The staffs of Gombe State Internal Revenue Service are fittingly trained on the automation of revenue collection.	92	3.35	.966	Agree
6	ICT capacity of staff is regularly updated through continues training.	92	3.14	.990	Agree
7	Gombe State Internal Revenue Service uses ICT to effectively collect tax.	92	3.84	.788	Agree
8	Tax collection, filing and processing is enhanced by the application of ICT.	92	3.87	.730	Agree
9	As the result of introduction of ICT revenue generation at the Gombe State Internal revenue Service has increased.	92	3.90	.757	Agree
10	Tax automation has resulted to reduction in number of revenue agencies and contractors.	92	3.22	1.046	Agree

Source: *Field work (2023)*

Analysis of data in Table 1 reveals the mean responses of Staff of Gombe State Internal Revenue Service on the availability of ICT infrastructure and increase in revenue collection in Gombe State Board of Internal Revenue. It shows that the overall mean responses of both categories of staff are above 2.50. This implies that all staff agree to item statements since their mean responses to the items are more than 2.50 benchmark mean. There are adequate Personal Computers for the staff of Gombe State Internal Revenue Service. ICT infrastructure (computers, scanners, printers, internet facility, websites, emails, etc.) is available for staff in the office and are regularly maintained; the financial resources allocated for ICT development and maintenance at the Gombe State Internal Revenue Service are sufficient; staff are trained on the automation of revenue collection and as a result of the introduction of ICT; and revenue generation at the Gombe State Internal Revenue Service has increased and resulted to reduction in the number of revenue agencies and contractors.

Analysis of Objective Two

Table 2: Mean and standard deviation of Staff of Gombe State Board of Internal Revenue on the introduction of ICT and the ease of doing business (tax remittance and collection) in Gombe state Internal Revenue Service

	Item Statements	N	Mean	Std. Deviation	Decision
1	The introduction of ICT by the Gombe State Internal Revenue Service have reduced the number of persons that visit the office	92	3.36	1.289	Agree
2	The introduction of ICT by Gombe State Internal Revenue Service has reduced the rate at which staff visits clients in the field for business	92	3.21	1.395	Agree
3	E-service has reduced the work load (working procedure) of staff in Gombe State Board of Internal Revenue	92	3.51	1.011	Agree
4	Service delivery of Gombe State Internal Revenue Service is enhanced by the introduction of ICT	92	3.64	.833	Agree
5	Record keeping is safer and more effective with the introduction of ICT in Gombe State Internal Revenue Service	92	4.08	.917	Agree
6	Application of ICT reduces time used in processing information	92	4.36	.689	Agree
7	Clients find it easier to remit taxes with the use of ICT.	92	4.00	.825	Agree
8	ICT in Gombe State Internal Revenue Service has made data storage and retrieval easier	92	4.36	.720	Agree
9	With the introduction of ICT, Gombe state Internal Revenue Service now issue e-receipts and Tax Clearance Certificates (TCC)	92	4.51	.620	Agree

Source: *Field work (2023).*

Table 2 shows that the overall mean responses of both categories of staff are above 2.5. This implies that all staff agree to item statements since their mean responses to the items are more than 2.50 benchmark mean.

Test of Hypothesis I
Ho 1:   There is no significant relationship between the availability of ICT infrastructure and increased revenue generation in Gombe state Internal Revenue Service.
The researcher also used ANOVA to test the hypothesis given in this section. The results are presented in Table 3.

Table 3: ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Within Groups	8.953	1	8.953	20.410	.000
Between Groups	39.481	90	.439		
Total	48.435	91			

Table 3 shows that there is a significant difference in mean between the availability of ICT infrastructure and the increase in revenue collection F(dfB,dfw) =F(1,90) =20.410, p<0.05. We therefore reject the null hypothesis and conclude that there is a significant relationship between the availability of ICT infrastructure and an increase in revenue collection in Gombe State Board of Internal Revenue. This agrees with the mean result as analysed in Table 1.

Test of Hypothesis II
Ho₂: There is no significant relationship between ICT and ease of doing business in Gombe state Internal Revenue Service.
The researcher also used ANOVA to test hypothesis two given in this section. The results are presented in the Table below:

Table 4: ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	24.724	1	24.724	36.494	.000
Residual	60.974	90	.677		
Total	85.698	91			

Table 4 shows that there is a significant difference in mean between the introduction of ICT and ease of doing business F(dfB,dfw) =F(1,90) =36.494, p<0.05. We, therefore, reject the null hypothesis and conclude that there is a significant relationship between the introduction of ICT and the ease of doing business in the Gombe State Board of Internal Revenue.

Discussion of Findings
Based on the data analysis in the last section, the study established that there is a positive relationship between the availability of ICT infrastructure and revenue collection in Gombe State Board of Internal Revenue. The average mean score of above 2.50 and the ANOVA results of F(dfB,dfw) =F(1,90) =20.410, p<0.05 as tested in hypothesis 1 are ample testimonies to this fact. This means that an improvement in the availability of ICT infrastructure has led to a corresponding improvement in revenue collection in the Gombe State Board of Internal Revenue. This finding agrees with that of Odoyo, et.al., (2013) that there is a relationship between Information Systems and efficiency/effectiveness in revenue collection; and that there is a strong positive relationship between Internal Control Systems and revenue collection. According to Fjeldstad & Heggstad, (2012), before the introduction of automated systems of revenue collection, authorities used manual systems of collections by using manual receipts and manual recording. Problems such as high collection costs, fraud, underpayment and other revenue leakages were evident. Leakages that occur because of untimely collection, corruption and under-collection can be reduced by streamlining and automating the revenue collection process. With a modern system of

revenue collection, sub-national governments can more effectively manage existing revenue streams as well as mobilize additional revenue by increasing collection efficiency as well as by expanding their revenue base. The study is useful in reviewing the Gombe State Board of Internal Revenues Act and statutes to cater for the integration of ICT in the management of activities of revenue collection

The study further established that there is a positive linear relationship between the introduction of ICT and ease of doing business in the Gombe State Board of Internal Revenue. The average mean score of above 2.50 and ANOVA result of $F(dfB, dfw) = F(1,90) = 36.494$, $p < 0.05$ have succinctly testified to this fact. This implies that a significant improvement in ICT Infrastructure will significantly increase the level of doing business in Gombe State Board of Internal Revenue. This finding agrees with Sani (2009) that by automating revenue collection, service providers have a better audit trail since all transactions captured can be detailed by the time the transaction took place, who performed the transaction, and where such transaction was done. He maintained that this prevents revenue losses through abuses as all moves are recorded electronically.

Conclusion

Based on the findings of this research, it is concluded that ICT has led to improvement in revenue collection in Gombe State Board of Internal Revenue and has led to the ease of doing business in Gombe State Board of Internal Revenue and that the use of ICT guarantees improved revenue accounting and reconciliation processes in Gombe State Board of Internal Revenue and has increased taxpayer compliance thereby reducing the rate of tax evasion.

Recommendations

The study recommends that the Gombe State Board of Internal Revenue should improve ICT infrastructure which includes, but is not limited to the provision of more computer systems and reliable UPS to all offices for staff of the organisation.

To further solidify the foundation for technological advancements, the Gombe State Board of Internal Revenue must establish dedicated IT departments equipped with the basic IT infrastructure.

GSBIR should also recruit competent staff possessing the required skills, and encourage periodic ICT training, to guarantee the continual upgrade and development of ICT professionals and sustain the momentum of progress. In essence, the study emphasizes that without a steadfast commitment to an improved ICT infrastructure, the envisioned modernization and innovation in revenue collection will remain elusive.

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