Effect of Information Communication and Technology Services on the Private Sector Practices: Evidence from the Nigerian Manufacturing, Trade and Financial Sectors

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Abstract

This paper examined the effect of Information and Communication Technology Servicesin the private sector of Nigeria using a time series data covering 1983 to 2020. During the COVID-19 pandemic while movement is restricted and lockdown across the nation, some businesses were still able to work due to the availability of ICT services, so to what extent has ICT affected the Nigerian Private sector. The data used for this study are secondary data sourced from the National Bureau of Statistics. ICT Services contribution to the Nigeria GDP is used as a proxy to ICT Services while Manufacturing, Trade and the Financial Sector contribution to GDP is used as a proxy for the private sector. The data wereanalyzedusing Least Square Regression Model while the unit root test was conducted using the Augmented Dickey-Fuller test (ADF)for stationarity. The result shows that ICT Services in Nigeria do not have a significant effect on the Nigerian Private Sector. However, it shows a significant effect on the Financial Service sector. It, therefore, recommends that other sectors of the Nigerian private sector like manufacturing should be supported through favourable policies on investment in ICT with less impact on their profit.

Keywords: Information Communication Technology, Private Sector, GDP, Financial Service

INTRODUCTION

The COVID-19 Pandemic has further shown the importance of Information and Communication Technology (ICT) in our lives and the future of business. Even in face of lock-down and restriction of movement, a lot of people and Organisations were still able to operate and communicate because of ICT in their respective regions. Services were provided and information was shared by staff and different organisations. In Nigeria, the National Information Technology Policy was approved in March of 2001 and formed also is organization as National Information Technology Development Agency which made Nigeria an ICT-capable country and the main player in ICT in Africa. In 2012 a new policy concluded a document of mission statements and vision of ICT policy in the country and part of the vision is to make the country a globally competitive and knowledge-based society and to integrate ICT into the socio-economic development of the country. Since the introduction of ICT in Nigeria, many businesses have moved from manual operation to that of computer and technology not minding the cost especially in the short run. The change not only affected the way business operates but also affects financial reporting. The use of computer applications and related systems were deployed by businesses for operation. Many Accountants had to undergo specific training to get the technical know-how to enable operating these applications.

The Nigeria economy is largely divided into two major sectors that are the Public and the Private Sector. The Private sector can also be divided into the Not-for-profit sector and the For-Profit. The scope of this research is on the For-private sector which will be referred to as the Private in this paper. The Private sector in Nigeria is majorly in the Financial and Real Sectors of the Economy. The real sector includes Manufacturing, Trade Agriculture e.t.c. Since the advent of ICT in Nigeria, the Private Sector especially the banking sector has been the major beneficiaries moving its activity which were mainly manual-based to computer and technology-based. Today, the activities of all financial institutions in Nigeria are technologically driven. The change in the Private sector generally affects its operation and the ways of doing business and this also include the way it accounts for its transactions. Gone are the days where

Accountants work long hours manually to meet up deadlines. With the advanced use of ICT in the private sector, it is important to determine the impact on Accounting in the private sector. This paper seeks to examine the impact of ICT on the development of private sector accounting in Nigeria, with a focus on itsimportance, challengesandpossible area for improvement.

LITERATURE REVIEW

Conceptual Framework

Information and Communication Technology (ICT)

Maziyar (2011) defines Information Technology (IT) as the area of managing technology and spans a wide variety of areas that include but are not limited to things such as processes, computer software, information systems, computer hardware, programming languages, and data constructs. The writer went further to state that, anything that renders data, information or perceived knowledge in any visual format whatsoever, via any multimedia distribution mechanism, is considered part of the domain space known as Information Technology (IT). According to Murray, James (2011), Information and Communications Technology (ICT) is an extended-term for information technology (IT) that stresses the role of unified communications and the integration of telecommunications (Telephone lines and Wireless signals), computers as well as necessary enterprise software, middleware, storage and audio-visual systems, which enable users to access, store, transmit and manipulate information. The duties of ICT cannot be overemphasized but a few of the duties that ICT professionals perform may include data management, networking, engineering computer hardware, database and software design, as well as management and administration of entire systems. ICT also covers areas such as processes, computer software, information systems, computer hardware, programming languages, and data constructs. Therefore, anything that renders data and information (or perceived knowledge) in any visual format whatsoever, through any multimedia distribution mechanism, is considered part of the domain space - known as Information and Communication Technology (ICT). ICT professionals perform a variety of functions (ICT Disciplines or Competencies) that range from installing applications to designing complex computer networks and information databases. Components of Information Technology according to Taiwo (2016), can be broken into;

i. Hardware: this refers to physical, tangible and touchable components. It is the part that can be touched and seen. They can be further classified into 4 groups, namely the Input devices, these are hardware devices used to send data into the computer. Examples are light pen, keyboard and mouse, the Output devices which hardware devices through which information is sent out of the computer. They include speakers, printers and monitors, the Central Processing Unit (CPU) which is the part of the computer that performs tasks as it comprises of the microprocessor which is the brain of the computer. And the Storage devices are hardware components that store data and they include two types, the Primary (stores information temporarily) and Secondary (stores information permanently), with examples given as RAM and ROM respectively.

ii. Software: This refers to intangible components that can only be seen. They include computer programs and codes that control the hardware devices. A computer program is a set of instructions written to perform a specific task and they are three categories namely the System software which provides the basic functionality of the computer, and it is made up of the Operating system and Support system with Linux and Diagnostic tools as examples respectively. The second category is the Application software which helps the users to perform specific tasks. Examples are Web browsers and Media development software, Quickbooks, Peachtree and other accounting software and the third is the Programing software which is used by software developers to create, debug, maintain and support other programs and software. Examples are JAVA and BASIC.

iii. Data: this refers to raw facts and figures that are processed into information. They are

generally stored in electronic devices until they are needed. An example is a NAME. Another example especially in the context is Accounting transactions that are to be captured into the computer systems.

iv. Procedures: these are the laid down rules and regulations that govern the way information is processed and exchanged. Internet/Network: the internet is a global system of interconnected computer networks that use the standard internet protocol suite or other networks to link several billion devices worldwide.

v. People: this refers to the manpower that is involved in the steps of IT activities. They probably determine the success or failure of information systems. The level of skill and experience they have with the applicable system determines how successful and efficient the whole system will be.

According to Harvard Business Review (2020), information technology can be categorized into three and they include the Function I.T which refers to technologies that make it easier to perform singular tasks and enhance the efficiency of such tasks. These technologies are mostly used by accountants, which is most relevant to this study and other professionals such as design engineers and doctors. The most common forms of function IT are Word processors and spreadsheets. The second one is the Network I.T which refers to technologies that provide media for people to communicate. It allows users to interact as they want without limitations. They include emails, instant messaging and blogs, and the third is Enterprise I.T which are technologies adopted by organizations to manage interactions among employees or with business partners. They are purchased and implemented by the organizations. They constitute applications that specialise in business processes and enhance business communications an example is Zoom.

Ogidan, Adekola, Emmanuel and Okogun (2017) listed in a table the different types of ICT applications and their uses as shown below.

ICT Application and their uses

Application	Use
Standard Office Applications - Main Examples	
Word processing	E.g. Microsoft Word: Write letters, reports etc
Spreadsheets	E.g. Microsoft Excel; Analyse financial information; calculations; create forecasting models etc
Database software	E.g. Oracle, Microsoft SQL Server, Access; Managing data in many forms, from basic lists (e.g. customer contacts through to complex material (e.g. catalogue)

Presentation software	E.g. Microsoft PowerPoint; make presentations, either directly using a computer screen or data projector. Publish in digital format via email or over the Internet
Desktop publishing	E.g. Adobe Indesign, Quark Express, Microsoft Publisher; produce newsletters, magazines and other complex documents.
Graphics software	E.g Adobe Photoshop and Illustrator; Macromedia Freehand and Fireworks; create and edit images such as logos, drawings or pictures for use in DTP, web sites or other publications

Specialist Applications

Accounting package	E.g. Sage, Quickbook; Oracle; Manage an organisation's accounts including revenues/sales, purchases, bank accounts etc. A wide range of systems is available ranging from basic packages suitable for small businesses to sophisticated ones aimed at multinational companies.
Computer-Aided Design	Computer-Aided Design (CAD) is the use of computers to assist the design process. Specialised CAD programs exist for many types of design: architectural, engineering, electronics, roadways
Customer Relations Management (CRM)	Software that allows businesses to better understand their customers by collecting and analysing data on them such as their product preferences, buying habits etc. Often linked to software applications that run call centres and loyalty cards for example.

Accounting and Accounting Information System

Onaolapo and Odetayo (2012) define accounting as the language of business as it records all transactions of an individual firm or other bodies that can be expressed in monetary terms. Accountants are constantly involved in the decision-making process incorporate organization. The accounting Profession contributes to the growth of individual companies, support and sustain non-profit organization, and assist governments in achieving their economic and social objectives and promote financial market performance, through the reporting of and assuring financial information. It is concerned with the measurement, disclosure or provision of assurance about financial information that helps managers, investors, companies and other decision-makers make resources allocation decisions. Taiwo (2016) highlighted the three types of business systems stating that the size of an organization, nature of business, the extent of computerization and management style determine the choice of system. The three types are listed below;

i. Manual System: this system refers to one where there is no computer involved in the accounting process. Financial transactions and reports are recorded and prepared manually. This is most common among small businesses. The accountants and relevant workers are involved in all the accounting processes which form a great workload on them. This method helps to save the cost of acquiring computers and software programs.

ii. Legacy System: this system can be said to be an old-fashioned computerized system. It existed before information technology became so sophisticated and engulfing in the world. It

has the purpose of storing old time information of organizations thereby serving as a backup system. But due to its old nature, maintenance cost is high as hardware and software parts of this system have become obsolete, and.

iii.   Computerized System (Modern, Integrated It Systems): this is a system that makes use of computers and software programs for all accounting processes. There is little human effort from the accountant that is needed as the IT experts and specialists are most important to train the accountant to use the system efficiently. This system incurs a cost on the business investing in the technical infrastructures. A computerized system is most common in large organisations and most organizations these days.

Important Roles of Information Communication Technology

Oladimeji and Folayan (2018) highlighted some of the roles and importance of ICT to the Nigerian Economy to include; Reduction transaction costs and time, thereby improving productivity; Immediate connectivity – voice data, visual- improving efficiency, transparency, and accuracy; Substitute for other, more expensive means of communicating and transacting, such as physical travel; Increase choice in the marketplace and provide access to otherwise unavailable goods and services; Widen the geographic scope of potential markets; Provide different channel knowledge and information of all kinds and; ICT sees faster sales growth, higher productivity, and faster employment growth. The impact of ICT on accounting is the ability of the management of the Organisation to develop and make use of computerized systems to track, monitor and record financial transactions in their respective governments. Paper ledgers, manual spreadsheets and hand-written financial statements have all been coded into computer systems that can quickly assess, process, and present all transactions into meaningful or financial reports, (Ahmed 2016). Most of the popular accounting systems can be tailored to specific Ministries, Departments or Agencies. This allows Ministries, Departments or Agencies to create individual reports quickly and easily for management decision-making.

Problems and Challenges an ICT in Nigeria.

Ahmed 2016 captures theproblems of Implementing an ICT Systemin the Private sector to include redundancy in manpower as accounting work is computer-based and thereby reduces the number of employees in an organization, and this could lead to a greater amount of unemployment. The staff that uses computer accounting software needs to understand the concepts of the software in other to improve efficiency. And this can be done through proper training. He also mentioned the high cost of Hardware and software inferring that the installation of computer applications and setting up the accounting is expensive, and this could be a huge challenge for the small organisation. The other areas he mentioned include getting the required skilled personnel to operate and maintain the system and the continuous cost of maintaining the system and process. Another major challenge is the design of Accounting Software for reporting. The Accounting sector just the ICT sector is inclined to change, with new ways, policies and procedures being introduced frequently. It, therefore, becomes a challenge for the accounting application to easily change in other to meet up with the change in the sector. A good example is a change in the change of nomenclature in the accounting presentation of statements with most Accounting Applications still using the old names for the presentation of financial statements. The initial cost of setting up a computer system for business and accounting purposes is usually high for businesses especially in the short-run term, and though subsequent maintenance cost is not as high, it could be relatively high for some businesses especially those majorly in the informal sector.

Measures against Information Technology Fraud and Hack

One of the downsides of the ICT is the susceptibility to fraud and hack. These elements can bring down a business or corrupt the financial reporting system. It is therefore important to be proactive in putting measures in place to prevent fraud and hacking. According to Adebayo (2015), proactively employing the

following logical and physical access control measures can minimise the nefarious activities of IT savvy fraudsters. On the logical steps should be taken:

i. Firewall Systems; Firewall systems should be installed. A firewall is a device that forms a barrier between a secured and open environment. Usually, the open environment is considered hostile. The most notable hostile environment is the internet. Generally, the types of firewalls available today fall into three categories; Router Packet filtering; Application firewall system; and Tasteful inspection.

ii. Password; Passwords should be used to protect the logical asset. However, passwords should be changed frequently. When an employee leaves the organisation. His/her password/s should be deactivated immediately. Determine ahead of time what a person should do if he/she discovers that his/her password is compromised. Reasonable senior officers should handle the management and administration of passwords in the organisation. The following password rules should be obeyed: Passwords should be five to eight characters in length. Anything shorter will be too easy to guess. Anything longer will be too hard to remember. Passwords should allow for a combination of the alpha, numeric, upper and lower case as well as special characters, Passwords should not be particularly identifiable with the user (such as first name, last name, spouse name, pet's name, etc), Previous passwords should not be allowed to be used after being changed, Logon IDs not used after several days should be deactivated to prevent possible misuse, the system should be able to disconnect a logon session automatically after unsuccessful attempts to apply a password after 2 to 3 tries, default passwords or vendor-installed passwords should be changed and not used.

iii. Encryption; Use encryption techniques during data/program storage and transmission. Encryption is a technique used to protect plain text by coding the data so that it is unintelligible to the reader.

iv. Intrusion Detection Systems; Install intrusion detection systems (IDS). These systems work in conjunction with routers and firewalls by monitoring network usage anomalies. It protects an organisation's information system resource from external as well as internal misuse. An ID operates continuously on the systems, running in the background and notifying administrators when it detects a perceived threat.

v. Biometrics; Personal attributes for identity verification can be used to determine or not a person should be allowed to gain access to an information technology facility. This entails the use of biometrics such as fingerprints, voice, eye, colour, iris and a host of other personal features to verify the identity of an individual. The shape of a person's hand i.e. hand geometry has also been found to exhibit sufficient interpersonal variability to serve as a basis for distinguishing one individual from another. Equipment has been developed that automatically measures one aspect of the hand, namely the lengths of the fingers, and used this information as a means of verifying a person's identity. In addition to all the above, Access Control List (ACL) should be maintained. This list specifies various users and what they have access to. Furthermore, access rules in the organisation should indicate who can access what. Access rights are usually at four levels (create, update or delete) only; and a combination of the above.

On the physical level, the following steps should be taken to check the activities of fraudsters:

i. Computer: Determine whether office computers could be used for other purposes such as games, etc. Determine also who is authorised to use which PC or should everyone have unrestricted access to all available computers. There should be clear instruction as to which software is allowed on the systems, which types of antivirus should be used, what operating systems are allowed on PCs should not be located in such a way that the information displayed on the VDU can be read through the wind or door.

ii. Web Access: Rules must be set as to which websites are restricted from being accessed. It should also be spelt out whether employees can access the web at all times or will there be web logon

hours. Also, determine which PC would have access to the internet. There should be rules as to the use of e-mails.

iii. Remote Access Facilities: There should be clear instruction as to whether remote access to the Organisation network and how the access is to be controlled. Determine whether remote access is for all officers. List the devices (hardware and software) as well as media through which remote access is allowed e.g. State whether access through internet cafes is allowed or not.

iv. Infrastructures: Adequate infrastructures should be made available with serious security considerations. In essence, proper climatic condition, adequate power supply, communications, burglary and fire fighting facilities should be maintained.

Nigerian Private Sector

In Nigeria, the private sector is said to include any self-employed person or any employer of labour who does not belong to the government or public sector. Put differently anyone who is an employer or self-employed and who does not belong to the government or public sector is believed to be operating in the private sector (Olayiwola and Busari, 2001). The private sector can also be divided into the For-profit sector and the Not-for-profit sector. The Not-for-profit sector consists of Organisations that are mainly concerned with Social Service with little or no emphasis on profit. Examples of this type of Organisation include Non-Governmental Organisations (NGOs), Civil Society Organisations (CSOs), Community Based Organisations (CBOs), Faith-Based Organisations (FBOs) e.t.c. The For-profit sector includes companies who are with the sole aim of making profit examples of these types of companies are in the Manufacturing, Trade, Financial, Production, Mining sectors of the Nigerian Economy. The scope of this research work is biased towards the For-profit sector.

Monday (2011), also opined thatthe private sector also refers to all economic institutions, business firms, foundations, and cooperatives etc that are not owned by the government. The private sector enterprises are often described by other names such as capitalism, free enterprises system, the voluntary exchange economy, the market system, and the profit system and went further to list the major characteristics of an effective private sector Organisation below;

i. Private ownership of business: In a private enterprise system, business or private enterprises are owned by individuals or groups rather than by the government or society. The owner of a business has certain rights which include: the right to operate the business with a minimum of outside interference, the right to retain control over a large part of the profit generated by the business, the right to compete freely with other businesses for raw materials, personnel, customers, new products, new production techniques etc and the right to enter business freely, either personally or by an investment of capital.

ii. Freedom of choice: the managers and workers are free to choose their occupations, to change jobs, and to negotiate salaries, wages and other benefits. Consumers are free to select the goods they buy with a minimum of government or social pressure.

iii. Private Property: This refers to the right of individuals or groups to own and control physical resources as well as personal possessions. The right to private property has been justified on ethical and pragmatic grounds.

iv. Limited Role of Government: In a market economy, the government is limited in its economic role but is not entirely inactive. Government functions such as administering justice, protecting individual freedom and providing for adequate national defence is to establish the economic rules of the game.

v. Profit Motive: The efficient allocation of resources in a market system is also affected by profit. Profit represents the difference between what a businessman receive for the products he sells and what he must pay to produce and market them.

Empirical Review

Henry (2019) examines the Effect of ICT on Economic Growth in Nigeria and states that economic drivers of most developed and developing nations are believed to be anchored on their population growth, GDP per capita, inflation rate and most importantly ICT. Using secondary data obtained from World Bank and subjecting the data to Regression, data gathered ranged from 2008 to 2018 and SPSS used for analysis using Regression as the test tool. The result reflects that increased inflation, population and GDP per capita have negative effects on the number of Internet Users thereby affecting the economic growth of the country. The study proffers recommendations that the Federal Government of Nigeria can adopt to enhance ICT in Nigeria for its economic growth which includes enhanced funding and the development of an ICT masterplan for the Nigerian State. Taiwo (2016) investigates empirically the impact of information technology on accounting systems and organizational performance. This study utilizes secondary data and Pearson's correlation was used for analysis using SPSS for a sample of 20 staff in financial services and other related accounting departments in Covenant University. The results of the empirical findings show that there is a significant positive relationship between the ICT system and accounting system and a significant positive relationship between ICT and organizational performance. Adebayo (2015) evaluates the relationship between ICT and the accounting profession in Nigeria,the research instrument employed is a closed-ended structured questionnaire administered to the staff members of the selected companies. The data collected and gathered from the research instrument employed, are analyzed using a chi-square statistical tool, a nonparametric test used to determine whether a systematic relationship exists between two (2) variables. SPSS was employed for the data analysis. The result generated from the study indicates that there is a significant statistical relationship between ICT and the accounting profession in Nigeria. The study concluded that a positive and strong relationship of ICT has an impact on the accounting profession in Nigeria and that ICT infrastructure is the key to the rapid economic and social development of a country, which has also impacted the accounting profession in one way or the other. The paper concluded that ICT use is correlated with workers skills suggesting that firms that use high levels of ICT also employ more knowledge workers.

Abisola (2014) examined the impact of information and communication technology on internal auditors and their immediate external environments. Data were collected through 510 semistructured questionnaires administered on the internal control staff of financial institutions in Nigeria. 218 questionnaires were found usable and were combined with 23 face-to-face interviews of top financial institutions' executives. The population chosen were restricted to only financial institutions that substantially make use of computer system in processing and controlling their data operations. The findings revealed that the spread in the use of information and communication technology (ICT) has brought new opportunities to many professionals including Accountants and internal auditors especially in breaking the old cultural debacle by enhancing their reporting and operational independence. Oladejo and Yinus (2014) examined the impact of information technology on cooperative services as a basis for the attainment of MDG objectives relating to E-commerce. Data collected from the stakeholders in cooperative organizations in Nigeria were analyzed using a frequency table, percentage and non-parametric statistical test, ANOVA was used to test the formulated hypothesis using STATA 10 data analysis package/software. The result of the finding shows that information technology is positively significant to cooperative service in Nigeria. Investment in IT by Cooperative organisations will improve their performance through a high level of patronage by members. This study recommended that thecooperative management should provide adequate IT facilities to the cooperative staff and proper training should be given to the employee in other to meet the quality of service needed by the members. Also, there should be a free flow of information between the cooperative organizations and their members. This study concludesthat Information Technology has an impact on the cooperative services in Nigeria, the principal impact being better management efficiency, service delivery, increased members surplus and patronage.

Theoretical Framework

Unified Technology Acceptance and Use of Technology Theory (UTAUT)

The unified theory of acceptance and use of technology (UTAUT) is a technology acceptance model formulated by Venkatesh and others in "User acceptance of information technology: Toward a unified view". The UTAUT aims to explain user intentions to use an information system and subsequent usage behaviour. The necessity of transferring Information Technology (IT) and Information System (IS) applications to institutions has become inevitable inobtaining organizational performance. However, investments in suchtechnology-intensive systems are inherently expensive and risky. Moreover, it is not known whether it will contribute to improving Organisational performance without using IT and IS applications. It is a verycommon problem for end-users (managers, employees, professionals) toresist using such technologies. Users may not be very willing to usetechnology to perform their jobs.

Information and Communication Theory

Information and Communication Theory also referred to as Information theory is sometimes referred to as the mathematical theory of communication. Itsfounder, Claude Shannon, is considered one of the greatest minds of the 20th century. Information theory is a mathematical theory that quantifies information and utilizes these quantities for modelling situations and solving optimality problems of communication and information storage. It deals with both theoretical and practical aspects of data compression and reliable transmission of information over noisy channels. The data source entropy gives a lower bound for the rate of data compression. Rates for reliable information transmission is bounded by the capacity of the given channel. The theory also includes a theoretical analysis of secrecy systems.Information theory hasprovided much guidance for the design of more reliable systems and has reshaped the boundariesbetween what is possible in communication and what is not.

Technology Acceptance Theory

The most cited theory was the Technology Acceptance Model (TAM). Davis (1989) presented a Theoretical model aiming to predict and explain ICT usage behaviour, that is, what causes Potential adopters to accept or reject the use of information technology. Theoretically, TAM is Based on the Theory of Reasoned Action (TRA). In TAM, two theoretical constructs, perceived usefulness and perceived ease of use are the fundamental determinants of system use and predict attitudes toward the use of the system, that is, the user's willingness to use the system. Perceived usefulness refers to "the degree to which a person believes that using a particular system would enhance his or her job performance", and perceived ease of use refers to "the degree to which a person believes that using a particular system would be free of effort.

METHODOLOGY

This paper used an ex-post facto research design, utilizing a dataset from 1983 to 2020 from the National Bureau of Statistics. The period represented in the scope of the data represents the total available since information relating to the splitting of GDP into sectors is only available from 1983. The data are secondary. It is time-saving and cost-efficient. The Ordinary Least Square (OLS) is used to measure the effect of Information Communication and Technology on the Nigerian Private Sector. The unit root tests using the Augmented Dickey-Fuller test (ADF) is used to check for the stationarity of the variables. The estimation technique of OLS test the validity and strength of the instrument. Since the research work is trying to establish a relationship between two variables. The Contribution to Information Communication and Technology Service is used as a proxy to Information Communication and Technology while, each of the Manufacturing, Trade and Financial sectors contributions to GDP are used as a proxy to the Nigerian Private Sector. The mathematical model of proportionality (Y = a + b X) provides a link between the dependent and independent variables as seen below:

$$ICT = \beta o + \beta 1xManf + \beta 2xTrad + \beta 3xFinc + \varepsilon$$

Where ICT = Information Communication and Technology,

Manf = Manufacturing,
Trad = Trade,
Finc = Financial,
βo to β3are Coefficient
and ε= Random Error.

RESULTS AND DISCUSSION

Table 1 Descriptive Statistics

	FINC	ICT	MANF	TRAD
Mean	1227280.	2717203.	2898493.	5178071.
Median	1177205.	635444.8	1789354.	2708895.
Maximum	2349684.	10537145	6684218.	11697588
Minimum	254993.4	202383.0	1018907.	1662301.
Std. Dev.	638381.6	3294619.	1925217.	3801954.
Skewness	-0.045913	0.959671	1.046043	0.710255
Kurtosis	1.788825	2.367526	2.446346	1.779742
Jarque-Bera	2.458962	6.806493	7.805600	5.844800
Probability	0.292444	0.033265	0.020185	0.053804

Source E-View

The mean for the Financial Sector is 1,227,280 with the maximum and minimum value of the sector 2349684 and 254993.4 respectively. The mean of ICT is 2,717,203 while the maximum and minimum values are 10,537,145 and 202,383 respectively. Manufacturing has a mean of 2,898,493 with a maximum of 6,684,218 and a minimum of 1,018,907. Trade has a mean of 5,178,071, a minimum of 1,662,301 and a maximum value of11,697,558. The skewness result shows that Finance is skewed to the left but normally distributed while ICT, Manufacturing and Trade are moderately normal and skewed to the right.

Table 2 Correlation Matrix

	FINC	ICT	MANF	TRAD
FINC	1.000000	0.855529	0.833791	0.883614
ICT	0.855529	1.000000	0.974118	0.977277
MANF	0.833791	0.974118	1.000000	0.971258
TRAD	0.883614	0.977277	0.971258	1.000000

The correlation matrix shows a very strong correlation among all the variables. 0.97727 of the correlation between ICT and Trade is the highest while 0.833791 of the relationship between Finance and Manufacturing are the lowest correlation.

Table 3 Regression Analysis

Dependent Variable: ICT
Method: Least Squares
Date: 10/24/21 Time: 21:42
Sample (adjusted): 1983 2020

Included observations: 38 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FINC	0.511082	0.214966	2.377504	0.0232
MANF	-0.094567	0.159393	-0.593298	0.5569
TRAD	0.226843	0.160927	1.409601	0.1677
C	35626.50	44223.80	0.805596	0.4261
R-squared	0.191106	Mean dependent var		31826.16
Adjusted R-squared	0.119733	S.D. dependent var		289159.7
S.E. of regression	271297.0	Akaike info criterion		27.95912
Sum squared resid	2.50E+12	Schwarz criterion		28.13149
Log-likelihood	-527.2232	Hannan-Quinn criteria.		28.02045
F-statistic	2.677573	Durbin-Watson stat		2.254423
Prob(F-statistic)	0.062539			

The regression analysis shows that Information Communication and Technology (ICT) is not statistically significant to affect the Nigeria private sector using the Probability value, the R-squared also shows that the effect of ICT on the Nigerian private sector is 19% which also confirmed that the effect is not significant. However, ICT significantly affect the financial sector but does not affect the Manufacturing and Trade sector significantly. The analysis shows that a one-unit change of ICT will affect the Financial Sector significantly, Trade moderately but no significant effect with Manufacturing.

CONCLUSION AND RECOMMENDATIONS

The findings show that Information Communication and Technology do not have a significant effect on the Nigeria Private Sector. However, among the variables used as a proxy to the Private Sector, ICT shows that it significantly affects the financial sector of the Nigeria Private Sector. The use of ICT is more prominent in the Financial Sector of the Nigerian Economy. The financial sector has deployed the use of different ICT platforms in providing services to its customers. This though has not been reflected in the other sectors of the Nigerian Economy like the Manufacturing, Trade and other sectors and this has reflected poorly in the Nigeria Private Sector. Aligning with the Unified Technology Acceptance and Use of Technology Theory (UTAUT), investments intechnology-intensive systems are inherently expensive and risky for other sectors of the Nigerian Economy who have over the years relay majorly on manual operation and this will impact their profit especially in the short-run. There is also the fear that it may not contribute significantly to improving Organisational performance and the end-users (managers, employees, operators, technicians) may not be open to change and therefore very likely toresist using technologies. It is therefore recommended that policies that will encourage businesses to invest the huge fund in ICT should be developed with the view of easing the burden on the companies profit especially in the year of implementation. These policies could include capitalization of the cost used to convert for manual to computer-based operation and also, low-interest rates from banks or government on borrowed funds to be used wholly for ICT development in an Organisation.

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