ISSN: 2251-032X Volume 6, Issue 2, Pages 130 - 142: 2024

Effect of Information & Communication Technology (ICT) on Accounting Practices in Nigeria using First Bank Plc Awka, Anambra State as an Evidence of Study

Prof. M.C. Ubesie (Dr) [1] & Erhimu Dickson [2]

Department of Accountancy,
Enugu State University of Science and Technology, Enugu State, Nigeria.

[1] ubesiemadubuko@yahoo.com
[2] dicksonerhimu1@gmail.com; 08033588674

Abstract

Research Objective: This study appraised the impact of Information and Communication Technology (ICT) on accounting practices within Nigeria's banking industry, with FBN Plc in Awka, Anambra State, serving as a case study. Specific objectives included evaluating the effect of ICT on recording accounting transactions, storing accounting data, and retrieving accounting information.

Methodology: A survey design was used, and Taro Yamane's formula determined a sample size of 40 respondents from a population of 45, with data collected through questionnaires. Statistical analysis was performed using SPSS 25 and linear regression to assess the relationships between ICT and various accounting practices.

Findings: Hypothesis testing revealed significant positive effects of ICT on accounting practices. ICT significantly influenced the recording of accounting transactions, with an F-statistic of 9.387 ($p < 0.001$), explaining 19.3% of the variance in the recording process. Additionally, ICT had a substantial impact on data storage, with an F-statistic of 46.127 ($p < 0.001$), explaining 54.8% of the variance. For information retrieval, ICT also played a significant role, with an F-statistic of 9.760 ($p < 0.001$), accounting for 20.4% of the variance. Each hypothesis confirmed that ICT positively affects these aspects of accounting.

Conclusion: The study concludes that ICT significantly enhances the recording, storage, and retrieval of accounting information in Nigeria's banking industry. The findings underscore ICT's essential role in advancing accounting practices within FBN Plc, Awka, as evidenced by increased efficiency and accuracy in these areas.

Recommendations: The study recommends that banks prioritize the integration of ICT in accounting practices to remain competitive and align with international standards. It also advocates for accounting firms to invest in IT training for personnel to stay updated with technological advancements. Additionally, the Nigerian government should work to stabilize power supply, as it is essential for maximizing ICT's potential impact on accounting practices.

Key words: *Information, Communication, Accounting Practice.*

1.0 INTRODUCTION

Today, the business world is changing rapidly. Frequent investments and rapid pace of changes in IT along with increased costs of research and development (R&D) all are reasons for globalization (Fishamar, 2002). During the past decades, the role of IT has changed in relation to how corporations manage and control their resources (Teng and Calhoun, 1996). Organizations are reacting to a wide range of ITs through different practices and with varied proportions based on opportunities and bottlenecks faced (Johnson et al., 1986). Decisions on the foundation of IT structure need to be linked to making decisions on designing organization of IT within organizations. As a result, IT plays a vital role in new trade, especially with respect to accounting performance (Efendi et al., 2006). IT alters the nature of practices of business and accounting basically (Hunton, 2002). The first advantage of relationships between accounting and IT is that they will be accepted gradually; without IT, accounting is not accomplished easily, and it is assumed that IT is a base for accounting data, allowing certain distortions on performance to be inquired (Granlund, 2007). Therefore, IT and accounting systems will constitute the main acknowledged part of accounting research. Although IT plays an important role in the accounting field, few studies have been performed on relationships between them.

In the recent past centuries, before the inception of Information and Communications Technology (ICT), the accountants of an organization were using a socially acceptable behavioral method of reporting accounting and economic reports, carried out during accounting year ends, the preparation of accounting records, book such as the profit and loss account, the balance sheet, cash book, cash flow statement, income and expenditure accounts.

The application of ICT on accounting practices in Nigeria has become a subject of fundamental importance and concerns to all business enterprises and indeed a prerequisite for local and international competitiveness. It is obvious that the way accountants plan and make decisions on what and how to provide their service in the accounting profession has been affected immensely by Information and Communication Technology (ICT). This has continued to change the manner in which accounting practice and their corporate relationships are organized worldwide and the variety of innovative devices available to improve and facilitate the speed and quality service delivery.

The use of various forms of information and communication technology such as software and ancillary equipment like computer hardware, database, internet, intranets, Extranet, Telecommunication, Oracle, Statistical Package for Social Sciences (SPSS), Structural Adjusted Program (SAP), Automated Teller Machine (ATM), debit cards, electronic commerce, Peachtree and Tax Software (Turbo Tax) to mention but a few, seem to have posed a problem to accounting practice.

These have translated into some forms of problem as the manner in which accountants can potentially add value to economic entities and societies is undergoing a metamorphosis.

Another problem is that accounting practice now requires a higher level of critical-thinking skills, such as designing business processes, developing e-business models, providing independent assurance and integrating strategic knowledge.

It is observed that, when Information Technology (IT) first arrived in the accounting profession, accountants initially automated existing processes rather than envisioning how information Technology could be used to conduct business in new and innovative ways. The system has been set; it is the duty of the accounting profession to devise a means of improving on Information Technology (IT).

Therefore; the adoption of Information Technology in accounting practice in Nigeria has resulted in greater speed, accuracy, timeliness and cost, which will obviously reduce the task required in professional accounting.

1.2 Objectives of the Study

The Major objective of this study is to ascertain the Effect of information and communication technology on accounting practices in Nigeria Banking Industry using *First Bank of Nigeria Plc*, Awka as an evidence of study.

Other specific objectives are:

1. To evaluate the Effect of Information Communication Technology on recording of accounting transactions.
2. To examine the Effect of Information Communication Technology on Storage of Accounting Data.
3. To ascertain the Effect of Information Communication Technology on retrieval of accounting Information.

1.3 Research Hypotheses

The following research hypotheses will be posed in their null format in order to test the above research questions:

H_0^1: Information Communication Technology does not have significant Effect on recording accounting transactions

H_0^2: Information Communication Technology does not have any significant Effect on Storage of accounting Data

H_0^3: Information Communication Technology does not have any significant Effect on retrieval of accounting Information.

1.4 Significance of The Study

This study will be of theoretical and practical benefits to all of the following parties.

1. **The Potential Investors:** These are groups who are interested in committing their financial resources to the purchase of a company's shares. The result of this study will arm them with the necessary tools with which to evaluate the financial report of a corporate organization as it affects them.

2. **The General Public:** This group shall benefit from this report by the knowledge that the business organization exists for them and not against them and as such has to live up to its full responsibilities.

3. **The Regulators of Financial Accounting Report:** This group includes the Financial

Reporting Council of Nigeria (FRCN), The Companies and Allied Matters Act (CAMA), Banking and Other Financial Institutions Act of 1991 (BOFIA), prudential guidelines for licensed Banks. The Insurance Act 2003. The study will help them to standardize and harmonize their operations.

4. The Government Including Tax Authorities, Departments who have Interest in the Financial Reports of Companies: The result of this work shall be of immense assistance to each of these user groups in the advancement of their interest.

2.0 REVIEW OF RELATED LITERATURE

2.1 Conceptual Review

2.1.1 Concept of Information and communication technology (ICT)

According to Hartzell (2006), Information and communication technology (ICT) is defined as a series of interconnected elements forming an organized whole with a common objective. It is also a set of interdependent or co-coordinated assemblage of parts, facts, concepts etc.

According to Smith (2016), Information and communications technology (ICT) is an extensional term for information technology (IT) that stresses the role of communications and the integration of telecommunications (telephone lines and wireless signals) and computers, as well as necessary enterprise software, middleware, storage and audiovisual, that enable users to access, store, transmit, and manipulate information.

According to Will Kenton (2020) Accounting practice is the process and activity of recording the day-to-day financial operations of a business entity. Accounting practice is necessary to produce the legally required annual financial statement of a company.

Accounting practice is necessary so that a company can produce the annual and legally required financial statement: the income statement, the comprehensive income statement, the balance sheet, the statement of cash flows and the statement of stockholders equity.

Finally, as the researcher of this topic I would say that information and communication technology is the processing of raw fact called data into information communicating the useful ideas to the ideal users, while Accounting practice is the process of recording the day-to-day financial operations of a business entity.

2.1.2 Concept of ICT and Accounting

There exist various authorities from Accounting, finance, Auditing and technologist who have seen and defined differently the concept of information and communication technology (ICT) and application in accounting. Prior to the emergence of this environment, the presence of Information Technology in organizations have typically taken all forms of specific computer application systems, such as accounts payable, account receivable, block chains and financial reporting systems, which either automate specific operational procedures or support certain managerial processes (Teng & Calhoun, 1996). It is usually argued that the first use of an information system was in relation to accounting (Rom & Rohde, 2007), because most often

IT was about the firm's financial ledgers and reporting systems (Granlund & Mouritsen, 2003). That's why one cannot talk about accounting without looking at the early works in Rome.

Information Communication Technology (ICT) has rapidly changed the accounting profession over the last decades (Hunton, 2002). Accounting educators during this time have increased the number of topics including ICTs being taught to accounting students (Chang & Hwang, 2003). This increase in ICT topics is attributed to an increased demand by public accounting firms for employees with this type of knowledge. In order to keep pace with a changing business environment (Elliott, 1995), public accountants have increased the number of services offered to clients such as online accounting and bookkeeping services, advisory services on selecting and implementing computerized accounting systems and accounting information data entry services. Accordingly, the advancement beyond the mere paper based recording, processing and reporting of economic activities (Banker, Chang and Kao, 2002), to an environment where ICTs now play a major role has provided opportunities and has posed new challenges for the accounting profession, which have occupied the attention of academics and researchers around the globe (Chang & Hwang, 2003).

Wintoki (1997) and Coker (1990) state that the development of accounting in Nigeria can be traced to the time when the Companies Ordinance of 1922 was enacted. The second major development of accounting education and training in Nigeria took place in the early 1960s, when the Colleges of Arts, Science and Technology were established in Ibadan, Enugu and Zaria in 1963, (Uche 2003). The development of the accounting profession in the country has been assisted by the establishment of the department of accounting in the Nigerian universities, polytechnics and colleges of technology (Badejo, 1997; Ajayi, 1996).

2.1.3 Accounting Practice

Accounting is regarded as the process of identifying, measuring, analyzing, presenting and communicating economic information to permit informed judgments and effective decisions by users of the information (Wood, 1996). Its practice is as old as civilization (Brown, 1968). Ancient bookkeeping originated in Venice as a result of increase in economic activities following the establishment of joint ventures and partnership businesses. Notable was Renaissance Italy in the 15th century. The book: Merchant of Venice (1418-1449) is a biography of an early businessman which provided detailed accounts of the advanced state of commerce and industry in Italy in the 14th, 15th and 16th centuries (George Jr., 1972). Growth in Venetian business activity which was maritime in nature spurred the Venetian government to build a shipyard – the Arsenal for the protection of their trade. Shortly, problems confronted the Arsenal, of which accounting was first to be recognized as a tool of control (George Jr., 1972). As a result, books of original entry and ledgers were introduced in 1370.

Despite that the merchants of Venice operated journals and ledgers, the origin of modern bookkeeping could be traced to 1494 when Luca Pacioli, an Italian Mathematician and Franciscan Friar published a work on double entry bookkeeping. Infact, Thomas Watt referred to this method of keeping accounts as his “darling science”, describing it as the first general methodologies of management (George Jr. 1972). The introduction of modern bookkeeping methods constituted the stop gap between ancient accounting methods and contemporary accounting thought. It served as a control technique to early managers who superintendent affairs of commercial organizations following the growth in industrial revolution (Nwanyanwu, 2006).

The growth in industries and commercial activities increased the demand for accounting services. Social and political developments in most countries ignited the need for accountability by public officers. Consequently, in 1887, the American Association of Public Accountants (AAPA) was formed. It later changed to become the American Institute of Certified Public Accountants (AICPA). In 1897, the Pennsylvania Institute of Public Accountants was established. By the 1800s, professional accounting bodies were established in Scotland and England. Nigeria had their turn in 1965, when the Institute of Chartered Accountants of Nigeria (ICAN) was established through Act of Parliament No.15 of 1965 (Nwanyanwu, 2006). Contemporary thinking in accounting is on efficiency, accuracy and timeliness of accounting information for decision making. In this direction, accounting practitioners now emphasize the adoption of a mechanized accounting system employing computers (Nwanyanwu, 2006). Further body of knowledge on accounting practice includes financial accounting, auditing and taxation.

2.1.4 Application of ICT in Accounting Practice

It should be noted that Complexities in service delivery and the necessity to improve information, communication and transmission has helped reduce cost and time has made it imperative for ICT to be applied in accounting practice be it locally or internationally. Software such as Sage, Peachtree and others have been developed to process and make decisions in financial accounting, auditing, taxation and other related areas of accounting practice. Financial accounting, which has remained the most ancient duty of accountants involving the preparation of cash books and ledgers, has today been simplified through the evolution of accounting software. In this dimension, Jaiyela (2007) reports that ecommerce models for exchange of transactions across organizations, enterprise resource planning (ERP) systems involving the use of integrated computer systems to collect data and produce a single financial report for all areas of a business are examples. Others are reconciliation software for the preparation of reconciliation statements, accounting packages – Oracle financials, DacEasy, Sage Accounting, Peachtree, QuickBooks, Sun Accounting, etc., for preparation of financial statements and other information required for management decisions as well as software for the preparation of payroll. Also, accounts payable and receivable transactions, inventory control, financial control over assets, analyses of data, provision of current and estimated values of businesses to users of accounting information (managers, board of directors, CEO, investors, bankers, suppliers and customers) (Jordan, 1999) are facilitated by computers in compliance with ICT.

Financial management reforms in some countries are reflective of adoption of ICT in accounting practice. For example in Ghana, a launch of public financial management reform (Yeboah et al, 2014) introduced a new system of record keeping of State budgeting and financial management. The system known as Ghana Integrated Financial Management Information System (GIFMIS) involves seven Oracle E- Business Suites modules – general ledger, accounts payable, accounts receivable, cash management, budgeting, fixed assets and human resource management. According to them, this is expected to constitute the official source of budget creation and management, cash and treasury management, financial control, accounting and reporting for the entire country. Undoubtedly, application of ICT will minimize difficulties involved in recording the veracity of transactions associated with the financial accounting component of accounting practice.

Examination of financial statements/reports through auditing of underlying transactions is also facilitated by ICT. Software exists for reviewing the integrity, accuracy and management of an organization's data processing environment. Few of them are ACL, IDEA, GAS, for revenue assurance; Oracle log miner, Sybase audit and other EAM (embedded audit modules) in several applications for database auditing. Others are Detection Master, Team mate for forensic audit; fraud detection software are also available (Jaiyeola, 2007). Similarly, production of financial reports is enhanced by ICT tools such as Microsoft word and Microsoft excel. Extensible business reporting language (XBRL) is another advanced accounting software that enables continuous and instantaneous reporting; it secures accuracy, efficiency and transparency in financial reporting through the web (Farewell & Pinsker, 2005). Aside from this, audit managers and seniors in public accounting firms have applied ICT in the development of audit plans and programmes, organization of audit activities and supervision and review of the work of junior auditors (Banker et al, 2002).

2.2 Theoretical Framework

2.2.1 Contingency theory

This suggests that an accounting information practice should be designed in a flexible manner so as to consider the environment and organization structure confronting an organization. Accounting information practice also needs to be adapted to the specific decisions being considered. In other words, accounting information practice needs to be designed within an adaptive framework.

The first paper to specifically focus on the contingency view of accounting information practice in the accounting literature was ‘A contingency framework for the design of Accounting information practice. (Gordon and Miller,2000). This paper laid out the basic framework for considering accounting information practice from a contingency perspective.

Gordon and Narayanan (2004) concluded that environmental uncertainty is a fundamental driver for designing management accounting practices among successful organizations. A key finding in this study was that decision-makers perceive a greater environment. Uncertainty; they tend to seek more external, non-financial and extant information. This latter finding has been confirmed by several studies that followed the Gordon and Narayanan paper.

2.2.2 Agency Theory

This theory has been one of the most important theoretical paradigms in accounting during the last 10 years. The primary feature of agency theory that has made it attractive to accounting researchers is that it allows us to explicitly incorporate conflicts of interest, incentive problems

and mechanisms for controlling incentive problems into our models. This is important because much of the motivation for accounting and auditing has to be with the control of incentive problems (Kapan and Norton 2003) compensation contracts bring these conflicting objective into equilibrium (David,Julie smith, et al 2009) the sharing rule that determines the allocation of outcome between the principal and the agents is called a contract, whether it is written or not. Thus, agency theory provides a vehicle for formal, direct analysis of the economic elements of incentive compensation contracts based on effort levels.

In conclusion, agency theory is used in this research to address two questions: how do features of information accounting and compensation practices affect (reduce or make worse

) incentive problems? And how does the existence of incentive problems affect the design and structure of accounting information practice? Agency theory provides a framework of addressing these issues and rigorously examining the link between accounting information practice, incentive and behavior.

2.2.3 Behavioral Theory

Early behavioral theory accounting research explored various relation between control system characteristics (for example; reliance on accounting performance measures or budget participation) and various criterion variables (example; performance or dysfunctional behavior) (Kren and liao 2008; merchant and simons 2006) understanding control system design and effectiveness, in general , begins with analyses of the characteristics of specific organizations and their effectiveness of an organization Campbell (2007) list some of the ways to measure the effectiveness of an organization's productivity, profits , growth turnover, stability and cohesion (scott W.R.2007) different theoretical perspective an account for the diversity in usage of effectiveness measurement. Rational perspective emphasizes goal attainment and focuses on output variables such as quality, productivity, and efficiency. Natural system perspectives focus on the support goals of the organization such as participant satisfaction, morale, interpersonal skills etc.

2.3 Empirical Framework

Many researchers have carried out research on information and communication technology (ICT)as the most important tool for firms obtaining competitive advantage.

Cherilla and Morris (2006), India carried out research on the Effect of information system in a firm. They stressed the importance of information systems on firm financial records and reporting. It was discovered that IT enhances accuracy and speed and financial reporting.

Apulu and Letan(2010), Ghana, Effect of information and communication technology on organization performance. The study showed that the use of ICT has doubled the performance of the organization.

Alam and Noor (2009), London carried out research between 2010-2012, on the impact of Information Communication Technology on enterprise development. The objective was to ascertain the effect of Information Communication Technology on the firm's development, which shows that Information Communication Technology is a valuable strategy that helps enterprises to remain competitive.

According to James (2013), Effect of Information Communication Technology on secretary's performance in contemporary organization a study carried out between 2013-2015 at Bayelsa State Nigeria stressing the need to increase the performance of secretaries in an organization. The study shows that Information Communication Technology has helped secretaries to be faster in carrying out their duties.

ISSN: 2251-032X Volume 6, Issue 2, Pages 130 - 142: 2024

Shanker (2016) carried out research on the difference between manual and computerized accounting systems at chron. He states that every organization with a manual system of operation has less opportunity of remaining competitive with the global world. Its objective is to enhance the organization 's competitive advantage. It was found that there is an increase in the organizational performance and competitiveness with the use of a computerized system of operation.

Bresnahanetal (2002), research on positive effect of joining Information Communication Technology and organizational design on growing firm productivity at united state (US) 20022004 stating the need of establishing or joining Information Communication Technology and organizational design to increase firms productivity and growth. The study showed that joining Information Communication Technology and organizational design enhances a firm's growth and productivity.

3.0 METHODOLOGY

This research is designed to examine the effect of ICT on Accounting Practices in Nigeria Banking Institutions of which First Bank Plc, Awka was used as a study of evidence. Data was collated from both primary and secondary sources as questionnaires were distributed to various respondents. From the total population size of 60 staff, sample size of 40 were drawn using Taro Yemen's (1964) formula. The researcher used a stratified random sampling in her study and a total of 40 questionnaires were retrieved. The Data collected were regressed with the help of SPSS 25.

4.0 DATA PRESENTATION AND ANALYSIS

4.1 Restatement of Hypothesis

Hypothesis I

H_0^1: Information Communication Technology does not have significant Effect on recording accounting transactions

H_A^1: Information Communication Technology do have significant Effect on recording accounting transactions

4.2.1 The Problem to be Investigated

Investigating the effect of Information Communication Technology on recording accounting transactions.

Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	ICT[b]	.	Enter

a. Dependent Variable: RAT

b. All requested variables entered.

Regression

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.037	1	1.037	9.387	.004[b]
	Residual	4.197	38	.110		
	Total	5.233	39			

a. Dependent Variable: RAT

b. Predictors: (Constant), ICT

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.445[a]	.198	.177	.33232	1.372

a. Predictors: (Constant), ICT

4.3 Findings

1. The findings show that Information Communication Technology has made accounting practice faster, embracing all the requirements by accounting standards.

2. The findings also show that the use of Information Communication Technology has affected accounting records.

3. The findings indicate that Information Communication Technology makes it easier to retrieve information in the area where millions of logical data is stored. It can be retrieved and be saved by the bank, thus helping banking industries to work and store accounting information without any fear of loss or damage.

4. The findings indicate that Information Communication Technology could be more effective in enhancing accounting practices in Nigeria; the constraints to accounting practice should not be neglected if accounting firms must thrive or perhaps compete with its international counterpart.

5. Accounting practice helps First Bank of Nigeria Plc, Awka Anambra state to be reliable, consistent and accurate in the job, produce the annual and legally required financial statement and customer's benefits from their services.

5.0 CONCLUSION

Information Communication Technology is making accounting practice easier, faster and cleaner; however, the rate at which technology has been introduced makes it more difficult for accountants to cope up with accounting practice. It is important to consider where the effect of Information Communication Technology lies, being in a broader information society conceptual model. These models have been used to illustrate information society which identifies the following inter-related segments: Information Communication Technology Supply (Information Communication Technology Sector), Information Communication Technology Demand (Use And Users), Information Communication Technology Infrastructure, Information Communication Technology products, information and electronic content and in a wider social and political context. Accounting practice is necessary so that a company can produce the annual and legally required financial statement: the income statement, the comprehensive income statement, the balance sheet, the statement of cash flows and the statement of stockholders equity.

5.1 Recommendations

Based on the finding, the recommendations given for effective management of Information Communication Technology on Accounting Practice are as follows:

1. The constraints as highlighted in this study to accounting practice should not be neglected if the broadcast industry must thrive or perhaps compete with its international counterpart.

2. Accounting firms should help train their IT personnel in order to compete, and catch up with the rapidly and swiftly changes in new technologies and resistance to change.

3. The Nigerian government needs to help stabilize power because it is a key factor in the effect of Information Communication Technology in accounting practice in Nigeria in particular.

4. Care should be taken to avoid the displacement of humans trained with computers in accounting practice.

References

Anyanwu W.C. (2010) Impact of computers on accounting and auditing. Federal polytechnic Oko- Term paper.

Chijoke L.A. (2004) An introduction to computers. 1st Edition Awka . Done printing press.

Francis C.S. (2005) Computer science. Canada. Fifth Edition. Nelson Education Limited.

Ibezim B.C. (2000) Computer Appreciation and sample Basic programming for the 1st century Enugu.

James B. (2000) effect of information and communication technology on secretarial performance in contemporary organizations in Bayelsa state. Information and knowledge management .3(5) Retrieval http: www.usteorg/journals index.

Nzomo S. (2013) impact of accounting information system on organization effectiveness of automobile companies. Kenya. 1st Edition pdf.

Ogenyi R.N (2002) Macro computer studies for beginners. Onitsha spiritual publications.

Shanker.S. (2016) Difference between manual and computerized accounting system. 1st Edition chron, pdf.

Tanembum A. S (2010) structural computer organization U.S.A person Education INC.

Wood and Onaga (2014) fundamental system of Computerized accounting. Ibadan, New model academic publisher ltd.

Adigwe, I. (2010). The effect of information and communication technology on accounting practice: a study of NTA and AIT. Unpublished project Lagos State University, School of Communication.

Ani, O. E. (2007) "Information Communication Technology (ICT) Revolution in African Librarianship: Problems and Prospects". Gateway Library Journal.Vol. 10(2).111118.

Change-de Liu (2006), De-Skilling Effects on Journalists: ICTs and the Labour Process. Chung Cheng University (Taiwan)

Dugo, H. T. (2008), Journalists Appropriation of ICTs in Accounting Gathering and Processing. Rhodes University.