

## Place of Information and Communication Technology (ICT) in Accounting Practice

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### **Abstract**

*This study conceptually examines the place of information and communication technology (ICT) in accounting practice. This is a library study where existing literature on the subject matter were reviewed so as to ascertain the effect of ICT on accounting practices. The study concludes that there is a significant impact of ICT on accounting systems. It was also observed that ICT has had great impacts on accounting system and organizational performance. In view of this, the study recommends amongst others that managers when implementing ICT should consider the external factors and how they affect adoption procedures. Also, staff training should always be provided in firm that wishes to evolve with ICT, so as to increase staff participation and not to make them redundant and unproductive.*

**Keywords:** ICT, Accounting Practice, Organisational Performance

### **Introduction**

Information and communication technology (ICT) in the present day 21<sup>st</sup> century constituted a major medium for the processing and dissemination of information. Its influence is so pervasive that virtually all aspects of business (formal and informal, profit and non-profit) which impact on the well-being of the society have been engulfed. According to Omidinia (2012), ICT is an increasingly powerful tool for participating in global markets, promoting political accountability, improving the delivery of basic services and enhancing local development opportunities (Anowor et al, 2022). This notwithstanding, the rapid development of ICT as expressed by Omidinia (2012) and Anowor et al (2014) affects the development of technology implementation in every aspect of life from business, entertainment, socials and education. In fact, ICT is a web that determines the economic growth of nations. The success of any nation is often decided by the degree and extent of socio cultural, socio economic and political improvement brought to bear through the application of science, technology and mathematics (Nwabueze & Ozioko, 2011; Anowor et al, 2013).

Jaiyeola (2007) examined ICT as a tool for effective performance of chartered accountants and noted that, with the automation of corporate processes which reduces paper work, the 21<sup>st</sup> century accountants are confronted with enormous challenges, either as financial accountants, management accountants, consultants, tax planners or as auditors. These challenges according to him, will invariably position information technology (IT) auditing as the future of the accounting profession. Gyamfi (2017) investigated information systems and accounting practices in Ghanaian public institutions. Findings identified

timely delivery of financial statements and the creation of avenue to access financial information as positive effects of ICT, while lack of ICT expertise, suitability and cost of accounting software and data security constitute major challenges to the adoption of ICT.

These studies, on one hand, considered from a theoretical dimension, the role of ICT in accounting professionals. On the other hand, a study of accounting practice of Ghanaian public institutions was undertaken. The private sector which is the major drivers of every economy was ignored. The purpose of this paper is to empirically investigate the influence of ICT on accounting practice in Nigeria, drawing evidence from accountants in accounting firms and the private and public sectors of the economy.

## Literature Review

### Concept of ICT

ICT involves the processing and dissemination of information through integrated electronic devices and related software. It is a term that includes any communication device or application, encompassing: radio, television, cellular phones, computer and network hardware and software, satellite systems, etc as well as the various services and applications associated with them such as videoconferencing and distance learning (Banker, Chang & Kao, 2002). Similarly, ICT could be seen as a broad-based technology (including its methods, management and application) that supports the creation, storage, manipulation and communication of information (Nwabueze & Ozioko, 2011).

ICT Development Index (IDI) ranked Denmark 1<sup>st</sup> on ICT use and access amongst the various countries of the world; with South Korea on the 2<sup>nd</sup> position. The top 30 countries in the rankings include Europe, Australia, Bahrain, Canada, Japan,

Macado (China), New Zealand, Singapore and the United States (International Telecommunications Union [ITU], 2014). The African continent is not left out in the effort to attain great heights in ICT acquisition. Amongst the global top 25 countries in internet usage, Nigeria is on the 10<sup>th</sup> position with estimated 57.7m users in 2014, expected to increase to 84.3m in 2022. Egypt is the second African country on the 17<sup>th</sup> position with estimated 36.0m in 2014, to rise to 47.4m users in 2022. South Africa is the 3<sup>rd</sup> African country on the 25<sup>th</sup> position with estimated 22.7m users in 2014 expected to increase to 30.9m in 2022 (Aderibigbe, 2014). Though, Nigeria is leading Africa in internet usage, its global ICT ranking according to World Economic Forum's Global Information Technology Report (GITR) (2015) with regard to Networked Readiness Index which measures a country's ability to implement and take full advantage of ICT is 119; coming behind South Africa 75<sup>th</sup>, Kenya 86<sup>th</sup> and Egypt 94<sup>th</sup> (Schlebusch, 2018). Investment in ICT infrastructure has been a source of concern to nations wishing to achieve stability in internet access and usage. Whereas the US federal government budgeted about USD 82 billion in 2014 on Information Technology (IT). Nigeria budgeted about ₦14.65bn in 2014 (Budget Office, 2014). Though, the ICT industry in Nigeria has attracted about USD 32bn in foreign direct investment (FDI) (Uzor, 2014), more investment is needed in the sector to actualise the vision of being amongst the first 20 industrialised nations by the year 2020.

### Application of ICT in Accounting Practice

Complexities in services delivery and the necessity to improve information transmission reduce cost and time has made it imperative for ICT to be applied in accounting practice. Software have been developed to process and take 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, Jaiyeola (2007) reports that e-commerce models for exchange of transactions across organisations, enterprise resource planning (ERP) systems involving the use of integrated computer systems to collect data and produce 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) are facilitated by computers in compliance with ICT (Terry, 2014).

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 introduces a new system of record keeping of State budgeting and financial management (Gyamfi, 2017; Onodugo & Anowor, 2013). The system known as Government 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 minimise difficulties involved in recording the veracity of transactions associated with 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 organisations 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 are 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 this, audit managers and seniors in public accounting firms have applied ICT in the development of audit plans and programmes, organisation of audit activities and supervision and review of the work of junior auditors (Banker et al, 2002).

Taxation services and planning are essential aspects of accounting practice where ICT could be applied. Wastages arising from time spent in filing returns and cost of transportation to tax offices to deliver letters for queries/observations raised could be avoided by taking advantages of ICT. Some countries have resorted to online systems for handling tax matters. In Peru, the National

Superintendent Tax Administration, collects and remits tax to the government using a computerised tax system known as “Tributacion Online” (Attama & Owolabi, 2008). The same is applicable in China where an information system known as Online Tax System is used in filling tax returns (Gebremedhin & Fenta, 2015). Nigeria is not left out in the quest to popularise ICT in tax management. Presently, tax collections for company income tax, personal income tax, withholding tax and value added tax, etc are online via paydirect acknowledgement platforms and tax promax method. In addition, issuance of revenue receipts to taxpayers is computerised and communications between taxpayers, tax consultants and the tax authorities are to a great extent, facilitated through e-mail. It is expected that, as investment in ICT increases, accounting practitioners will be relieved of the burden and time associated with manual approaches by shifting to computerised processes.

#### **Benefits of ICT in Accounting Practice:**

From the body of knowledge, the arrival of ICT has made accounting practice to be more efficient than ever. Findings from a study of five offices of international public accounting firms with substantial investment in audit software and knowledge sharing applications, indicate significant productivity gains, following ICT implementations (Schlebusch, 2018). The maintenance of ledgers, spread sheets and other accounting related books manually have been computerized for quick and easy preparation of financial statements and reports (Granlund & Mouritsen, 2003). Reduction in transaction cost, overcoming constraints of distance, transacting across geographic boundaries leading to improvement in activities within organisations have been made possible with the emergence of ICT in accounting practice (Shanker, 2008).

Also, computerized accounting system improves the performance of accounting departments of organisations by increasing just – in – time accounting information (Botchway, Yeboah-Boateng & Afful, 2019). Cashflow statements income statements, historical financial summary and statements of financial position can now be accessed more readily with computerised accounting system. Accuracy and timely delivery of accounting information, speed and processing of large volumes of transactions, storage and retrieval of data for decision making, cross border information resources via the internet and revenue assurance and cost control techniques (Jaiyeola, 2007) are immense benefits associated with ICT. Aside the foregoing, the adoption of ICT in accounting practice has made the profession to be more scientific as well as improved reliability of financial reports.

#### **Challenges of Adopting ICT in Accounting Practice:**

The main medium for effective ICT adoption in accounting practice is computerisation of accounting systems and business processes. Inadequate knowledge of this fact impairs the desire to full utilisation of ICT in processing accounting related transactions. In this direction, lack of cognition of accounting computerisation by enterprise leaders, particularly those in medium and small sized organisations poses a challenge (Bhasin, 2012). According to Divaharan and Ping (2010:745), shortage of funds required for investment in ICT facilities is another factor associated with the adoption of ICT in perfecting accounting transactions.

Amongst the important ICT infrastructures is power (electricity). Its shortage or instability is challenging to ICT adoption. As a result, most organisations have resorted to running independent power

generating sets to operate business facilities that require electricity. Also constituting an obstacle to effective ICT adoption in accounting practice is lack of professional skill of computer (Bell, 2011). Other challenges are high cost of computer systems and software, frequent breakdowns of computer systems and high cost of internet anti-virus protective devices. Inadequate business patronage for consistency in utilization of computer personnel equipment and software are contributory.

### Conclusion

From the foregone, we can say there is a significant impact of ICT on accounting systems in organizational performance. We can conclude that ICT has had great impacts on accounting system and organizational performance. In recent time, it has been firms' desires to stay relevant by incorporating ICT systems into their operations. Businesses now go the extra mile to invest greatly in ICT without being guaranteed of returns, these of which is a huge risk. The findings in this research work show that in the implementation and adoption of information technology systems, not only the firms are relevant but other external factors such as social influences and control, norms, beliefs and so on, determine the extent to which ICT can be adopted. As a way to add to existing knowledge, this study aims to educate managers, employees, government and other stake holders on the need to adopts ICT. This study further serves to provide information to employees on impact of ICT on their jobs and the manner in which they can adjust to the frequent changes in accounting practice like the tax pro max recently adopted by the FIRS.

### Recommendations

1. It has been proven that there is a significant impact of ICT on accounting systems and organizational performance; therefore, organizations are encouraged to invest more in such technologies.
2. Managers when implementing ICT should consider the external factors and how they affect adoption procedures.
3. Staff training should always be provided in firm's that wish to evolve with ICT, so as to increase staff participation and not to make them redundant and unproductive.

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