

**IMPACT OF ICT ON GENERATION OF ACCOUNTING INFORMATION IN
NIGERIA**

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ABSTRACT

The study assessed the impact of ICT on generation of accounting information in Nigeria. The population of this study consisted of all accountants with ICT skills and efficiency in Akwa Ibom State civil service and auditing firms. The study adopted a survey research design while stratified random sampling technique was used in selecting the respondents. The instrument for data collection tagged “Quality Assurance and Quality Accounting Teachers Questionnaire” (QAQATQ)” was administered to the respondents and used for the study. The instrument was vetted by the researcher’s supervisor who is an expert in the field before the reliability test was conducted which produced the reliability coefficient of 0.75 proving the instrument to be reliable for the study. Data collected were analyzed using Chi-square analysis. From the results of the data analysis; There is significant influence of ICT on speedy creation of accounting information. There is significant impact of ICT on quick access to accounting information. . It was therefore recommended that accountants should adopt the use of ICT on accounting practice in Nigeria, as this improves greater speed, accuracy, timeliness and cost will be cut down on their task as a professional.

Keywords: ICT, Speedy Creation, quick access, accounting information

Introduction

In the recent past centuries, before the inception of Information and Communications Technology (ICT), the accountants of an organization were using a socially acceptable behavioural 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. Linus (2012) asserts that the application of Information and Communication Technology (ICT), on accounting practice in Nigeria has become a subject of fundamental importance and concerns to all business enterprise and indeed a prerequisite for local and international competitiveness. It is obvious that the way accountants plan and take decision 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 device available to improve and facilitate the speed and quality service delivery. The implication of technology has indeed caused obvious changes in organizations relating to their accounting systems and organizational performance, which has been of great concern and interest to the masses.

According to Francis (2013), Information Technology is a generic term that covers the acquisition, processing, storage and dissemination of information. It is the application of computers and communication technology in the task of information handling, information and information flow from the generation to the utilization levels including generation of accounting information. Francis (2013) asserts that though it is proved that information technology has brought about positive changes in organizations, familiarization has not been the easiest. Organizations have to follow the trend, to be up-to-date, and so have to invest as much as they can. Accounting information on its own is very tasking as it entails dealing with great figures and numbers, bulk calculations and much writing but ICT has made it easier to maintaining the information. ICT has provided accounting system with a high-level of reliability of accounting information as a result of valid procedures that are efficient and effective. There is greater assurance of a back-up of all information as ICT provides measures to store data more than once easily.

Statement of the problem

In recent times, the usage of computers and other advanced technology have increasingly been adopted in most practices including accounting. Prior to this, accountants were vigorously involved in all accounting activities as the traditional methods were in place. Daily records had to be kept by humans, preparation of financial statements such as the statement of financial position and statement of comprehensive income were done manually by the accountant.

It seems that the use of Information and Communication Technology (ICT), by large or small firms has been a challenge to some users and companies. It is presumed that growth within management accounting and Information system is coming alive with the advent of Information and Communication Technology (ICT), such as Enterprise Resource Planning (ERS) system, software and ancillary equipment such as Automated Teller Machine (ATM), debit cards, electronic commerce, computer hardware, database, internet, intranets, Extranet, Telecommunication, Oracle, Structural Adjusted Program (SAP), Peachtree, Tax Software(Turbo Tax) and Statistical Package for Social Sciences (SPSS).

It is observed that, when Information and Communication Technology (ICT) first arrived on accounting profession, accountants initially automated existing processes rather than envisioning how information and Communication Technology could be used to conduct business in new and innovative ways. The system has been set; it is the duty of accounting profession to device a means of improving on the Information and Communication Technology (ICT). Therefore; if accountants adopt the use of ICT on accounting practice in Nigeria, then greater speed, accuracy, timeliness and cost will be cut down on their task as a professional.

Purpose of the Study

The purpose of this study is to assess the impact of ICT on generation of accounting information in Nigeria. The specific objectives are:

1. To examine the influence of ICT on Speedy Creation of accounting information
2. To find out the impact of ICT on quick access to accounting information

Research Questions

The following research questions will be answered:

1. To what extent does ICT help in speedy creation of accounting information?
2. To what extent does ICT help in enhancing quick access to accounting information?

Research Hypotheses

The following hypotheses will be tested:

1. There is no significant influence of ICT on speedy creation of accounting information
2. There is no significant impact of ICT on quick access to accounting information

Literature Review

Concept of Accounting Information

From the Business Dictionary, accounting information is referred to as ‘an organized set of manual and computerized accounting methods, procedures, and controls established to gather, record, classify, analyse, summarize, interpret and present accurate and timely financial data for management decisions’. It is a particular way in which an organization records and reports its financial information. It refers to the methods, principles, procedures and standards followed by an organization in recording and reporting business events and transactions. This system is made up of all the people and machines informed in accounting information.

An accounting information is used to manage the income, expenses and funding of a business. In old times, accounting information were commonly manual but now they are mostly computer-based. This system is made up of all the people and machines informed in accounting information. An accounting system is used to manage the income, expenses and funding of a business. In old times, accounting systems were commonly manual but now they are mostly computer-based.

Roles of Information and Communication Technology

According to Anonymous (2014), information and communication technology plays numerous roles including the following ones:

- **Education:** The learning process has never been this easy. All thanks to advancement in Information and Communication Technology. Today, unlike yesteryears, you can stay in Nigeria and be offered admission to study in reputable institution abroad. You may also embark on online study and be certified in due time. This has not only reduced cost of education, but has also broken boundaries and decreased dependence on classroom learning.
- **Business and Industries:** Improvement in Information and Communication Technology has also simplified the processes involved in business transaction. For instance, one does not need to go to UK to buy UK made products at a cheaper price but only does this transaction at the comfort of your home, over a cup of coffee and have it shipped down to your country through various online channels. .
- **Financial Institutions:** Banks and other financial institutions also rely on Information and Communication Technology to store and maintain customer’s record, prepare financial statements and reports. As well as guarantee safety of financial transactions of their

customers.

- Government and Politics: The influence of Information and Communication Technology on governance and the political process has increased tremendously over the past 2 decades. Especially, in Nigeria. ICT has remained the shortest route through which the government passes information across to the masses.

Information and Communication Technology on speed and productivity of Accounting Information

ICT on accounting information has provided a less rigid form of keeping accounting information. Hitt and Brynjolfsson (1996) assert that firms that adopt ICT innovations seem to experience significant increases in their financial performance, as productivity gains are translated into benefits to customers. However, non-adopting firms may suffer from productivity decreases due to the competition from their IT-adopting counterparts. According to the OECD (2000), countries which invest the most in these technologies are also leaders in productivity growth and communication technology. Re-evaluating the way we work, the places where we work and how we get there, are an important part of seeking to work more sustainably.

ICT has significantly impacted the accounting information profession in the past two decades in the sense that firms are increasingly using computers to facilitate electronic work papers and also to facilitate documentation. This goes alongside other activities focusing on waste reduction, recycling and finding more environmentally-friendly components for products. As there are various accounting software, an accounting process can be done in diverse manner. There are studies that analyse the ICT role on company's productivity and obtain results that have led to "productivity paradox" (Brynjolfsson and Hitt, 1996). According to OECD (2000), ICT has provided accounting system with a high-level of reliability of accounting information as a result of valid procedures that are efficient and effective. ICT on accounting system has provided a less rigid form of keeping accounting information. As there are various accounting software, an accounting process can be done in diverse manner. Financial information can be gotten easily at the time when they are required with ICT. As similar information have been classified and stored precisely, it is easy to access when needed.

Information and Communication Technology and Quick accessibility of Accounting Information

In accounting information, a reliable protocol provides notifications to the sender as to the delivery of transmitted data, as opposed to an unreliable protocol, which does not provide assurance of the delivery of data to the intended recipient(s) (Granlund and Mouritsen, 2003). Reliability is a synonym for assurance, which is the term used by the International Telecommunication Union (ITU) and Automated Teller Machine (ATM) for record keeping of transactions made. Forum in the context of the ATM Service-Specific Coordination Function, for example for transparent assured delivery with ATM Adaption Layer 5 (AAL5) this adapter views "accurate" details of the transaction made by the customers (Prentice Hall PTR, 1995). In Accessibility, making a website (including any Intranet) compatible with screen readers such as Job Access with Speech (JAWS), will allow employees who are visually impaired to gain access to important information, and as such remain productive in the workplace.

According to Coenen (2005), forensic accountants utilize accounting, auditing and investigation skills while conducting an investigation. These accountants are trained to look into the dispute in a number of ways. They often retain to analyze, interpret summarize and present a complex manner which is understandable and probably supported. Also they are often involved in various activities such as investigating and analyzing financial evidence, developing computerized, exhibiting documents and presenting the evidence obtained (Coenen, 2005). Information Communication Technology (ICT) has taken the firm's financial ledgers and reporting systems and no form of accounting is possible without it (Granlund and Mouritsen, 2003). The resulting statistical reports can be used internally by management or externally by other interested parties including investors, creditors and tax authorities (Dumitru, 2010).

Creating items such as employee handbooks and staff directories using accessible ICT not only allows individuals with disabilities to gain access to information, but also increases a business' bottom line. Implementing the use of accessible ICT for employees with disabilities means forming collaborative relationships with companies that provide assistive technologies. One such company that is commonly used by customers and employers, alike, is sitecues by Ai Squared. The sitecues technology provides intuitive zoom and speech functionality for people with print disabilities. It builds zoom and speech capabilities right into websites, so people with low vision and other visual and print difficulties can more easily see and hear content. Communication equipment aging is an indisputable reality in the life of power systems. In the world, many companies have equipment called aged due to their bad performance and increasing failure rate. Existing research has focused mostly on the relation between ICT investment and company performance notably in studies that attempt to measure the level of ICT investment and company productivity or even the financial return on ICT investments (Dedrick, Gurbaxani and Kramer, 2003). These equipment failure and outages are higher than the acceptable level and are increasing during the time. The operating and maintenance cost of power systems are increasing with increasing equipment failures and outages rate. Thus, the reliability of equipment aging has a more importance in the power systems. Electrical power systems are formed many communication equipment such as RTUs, PMUs, multiplexers, routers, gateways, etc. With the passage of time, the more the life of a distribution system, the more its components become aged and are so called old. The lack of timely replacement of old equipment, the overloading different elements and no repairing of this system can be highlighted as reason of aging the distribution system. ICT has provided accounting system with a high-level of reliability of accounting information as a result of valid procedures that are efficient and effective.

METHOD

Research Design

This research was designed to ascertain the use of ICT in generating accounting information. Hence, this work adopts a survey research. This design is suitable because it has to do with describing and explaining events in their natural setting.

Area of the Study

The research area for this study was Akwa Ibom State.

Population of the Study

The population of this study comprised all accountants with ICT skills and efficiency in Akwa Ibom State civil service and auditing firms.

Sample size

A stratified random sampling technique was used to draw the 250 respondents. Out of the 250 respondents 220 respondents were from the state civil service while 30 of them were from auditing firms in the study area.

Instrumentation

The main instrument used in this study was questionnaire titled “Quality Assurance and Quality Accounting Teachers Questionnaire” (QAQATQ). The questionnaire was made up two sections, (sections A and B). Section A was used to collect information on personal data of the respondents while section B of the questionnaire was made up of two variables such as views quality assurance, effective training of accounting education students. The obtained data was coded statistically before the statistical analysis of the data.

Validation of the Instrument

For face and content validity, the instruments were validated by the supervisor and another experts in accounting in the University of Uyo, Uyo Akwa Ibom State. Through the validation the items were re-arranged and the ones found to be too weak and inadequate were removed. This modification resulted in the production of the final drafts that were administered on the respondents.

Reliability of the Instrument

Cronbach Alpha technique was used to determine the level of reliability of the instrument. In the trial test, a total of 40 respondents who did not form part of the main study were randomly selected and the instrument administered on them. The reliability coefficient obtained was 0.75 and this was high enough to justify the use of the instrument.

Data Analysis

Chi-square analysis was used to analyze the data collected and collated. The hypotheses were tested at .05 level of significance.

RESULTS

Research Question One

The research question sought to find out the extent to which ICT helps in speedy creation of accounting information. To answer the research question, percentage analysis was performed on the data, (see table 1).

Table 1

Percentage analysis of the extent to which ICT helps in speedy creation of accounting information.

RESPONSES	FREQUENCY	PERCENTAGE
HIGH EXTENT	243	97.2
LOW EXTENT	7	2.8
TOTAL	250	100%

From the result of the above table 1, It was observed that 243 (97.2%) of the respondents affirmed high extent of the influence of ICT in speedy creation of accounting information while 7(2.8%) of the respondents affirmed low extent of the influence of ICT help in speedy creation of accounting information.

Research Question Two

The research question sought to find out the extent to which ICT help in enhancing quick access to accounting information.

To answer the research question, percentage analysis was performed on the data, (see table 2).

Table 2

Percentage analysis of the extent to which ICT help in enhancing quick access to accounting information

RESPONSES	FREQUENCY	PERCENTAGE
HIGH EXTENT	239	95.6
LOW EXTENT	11	4.4
TOTAL	250	100%

From the result of the above table 2, It was observed that 239(95.6%) of respondents affirmed high extent of the influence of ICT in quick access to accounting information while 11(4.4%) of the respondents affirmed low extent of the influence of ICT in quick access to accounting information.

Hypothesis Testing

Hypothesis 1

The null hypothesis states that there is no significant influence of ICT on speedy creation of accounting information. (See table 3)

Table 3

Chi-square analysis of the influence of ICT on speedy creation of accounting information

Responses	Observed Freq	Expected Freq	X²
HIGH	243	125	
LOW	7	125	
TOTAL	250	250	222.78*

***Significant at 0.05 level; df = 1; Critical = 3.48**

Table 3 shows the calculated X²-value as (222.78). This value was tested for significance by comparing it with the critical X²-value (3.48) at 0.05 levels with 1 degree of freedom. The calculated X²-value (222.78) was greater than the critical X²-value (3.48). Hence, the result was significant. The result therefore means that there is significant influence of ICT on speedy creation of accounting information.

Hypothesis 2

The null hypothesis states that there is no significant impact of ICT on quick access to accounting information. (See table 4)

Table 4

Chi-square analysis of the impact of ICT on quick access to accounting information

Responses	Observed Freq	Expected Freq	X²
HIGH	239	125	

207.94*

LOW	11	125

TOTAL	250	250
=====		

***Significant at 0.05 level; df = 1; Critical = 3.48**

Table 4 shows the calculated X^2 -value as (207.94). This value was tested for significance by comparing it with the critical X^2 -value (3.48) at 0.05 levels with 1 degree of freedom. The calculated X^2 -value (207.94) was greater than the critical X^2 -value (3.48). Hence, the result was significant. The result therefore means that there is significant impact of ICT on quick access to accounting information.

DISCUSSION OF THE FINDINGS

The result of the data analysis in table 3 was significant due to the fact that the calculated X^2 -value (222.78) was greater than the critical X^2 -value (3.48) at 0.05 level with 1 degree of freedom. The result implies that there is significant influence of ICT on speedy creation of accounting information. The result therefore was in agreement with the research findings of Hitt and Brynjolfsson (1996) who asserts that firms that adopt ICT innovations seem to experience significant increases in their financial performance, as productivity gains are translated into benefits to customers. The significance of the result caused the null hypotheses to be rejected while the alternative one was accepted.

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Conclusions

Based on the findings of the research work, the researcher concludes that in Akwa Ibom State, there is inadequate number and quality of ICT equipment for accountants to use. There is significant influence of ICT on speedy creation of accounting information. There is significant impact of ICT on quick access to accounting information.

Recommendation

Based on the findings of the work the following recommendations are deemed necessary:

1. There should be adequate number of ICT equipments for use in the civil service. Besides, accountant should be trained on effective use of the CT equipment.
2. Accountants should adopt the use of ICT on accounting practice in Nigeria, as this improves greater speed, accuracy, timeliness and cost will be cut down on their task as a

professional.

3. Each accountant should be provided with laptop so that it can help them work even at home for timely delivery of the jobs handled by them.

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