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Impact of Automated Financial Accounting System on Audit Processes of Selected Companies in Nigeria

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ABSTRACT

The study was carried out to assess the impact of automating financial accounting system on audit processes of selected companies in Nigeria. The objectives were to assess the relationship between an automated data capturing system and audit planning and also identify the influence of an automated data capturing system on gathering of audit evidence. Four companies, made up of two companies each from manufacturing and telecommunication sectors were selected using purposive sampling technique. Four audit firms were also selected purposively being auditors of these companies. The population of the study was the entire staff of these companies and staff of the audit firms. The study used primary source of data. Product-Moment Coefficient Correlation and Simple Percentage were used for data presentation and analysis. The result revealed a weak positive relationship between automated data capturing system and the duo of audit planning and audit evidence. The study among others recommended that audit firms should improve on their staff competency through training and retraining, workshops and seminars so that auditors can deal with this type of activities with high degree of professionalism and competency. It also recommended the need for constant enlightenment of management of various organizations about risks associated with Automated Accounting System and how to deal with it during audit processes.

Key words: Automated Accounting System, Audit Processes, Automated Data Capturing, Audit Evidence and Audit Planning

INTRODUCTION

Accounting evolved from everyday activities of an organization to produce relevant information for decision making. Information on financial activities is thus vital to organization's existence, survival and growth. Proper and accurate record of these activities is therefore an effective means of generating the required accounting information. Every corporate organization, private or public, require records of its financial activities be kept for performance evaluation.

However, the method of transmitting financial information has been greatly influenced by rapid changes in Information Technology and introduction of computers. The first computing machine created was used for accounting which marked the new beginning in the history of the profession as it is being increasingly embraced by organizations to simplify accounting records.

The introduction of computers and innovations in Information and Communication Technology (ICT) has changed the manner accounting and auditing functions are performed. Computerization of financial accounting system has posed challenges to the accounting profession as accountants now face a number of problems especially when doing accounting and auditing of companies in the electronic environment. It has however increased the fraternity (scientific exposure) of accountants to improve the service levels and variety of services rendered to clients.

Traditionally, auditors' schedule included discrete phases of planning but in today's continuously evolving technology-driven world of financial statement, auditors might have to revise the traditional audit schedule due to changes in technology and perform tests on a continuous basis. Auditing in e-environment is highly challenging due to the fact majority of documents are kept electronically. Some of the challenges include lack of source documents which evidenced a transaction, lack of audit trail, inadequate knowledge of computerized process of accounting data and electronic initiation and approval of transactions.

In today's business environment, most financial accounting systems have been computerized and automated with little or no paper documentation. Technologies have greatly changed the nature of audits which have so long relied on paper documents. Auditors performing attest services for clients that process financial transactions electronically therefore need to go extra miles to be professionally and technically competent in order to perform an acceptable audit.

The study assessed the impact of automated accounting system on audit processes in selected companies in Nigerian over a period of five years (2007 - 2011). The objectives of the study were to: assess the relationship between an automated data capturing system and audit planning and also to identify the influence of an automated data capturing system on gathering of audit evidence. The study formulated two hypotheses:
$H_{O1:}$ "there is no significant relationship between automated data capturing system and audit planning"
$H_{O2:}$ "there is no significant relationship between automated data capturing system and gathering audit evidence"

The study focused on two sectors: manufacturing and telecommunication sectors with two companies selected in each industry. These companies were selected due to the sophisticated nature of their accounting systems. In addition, the study was extended to audit firms in order to get professional views on the subject matter. The auditors selected were therefore auditors of these companies. The outcome of this study immensely benefits various groups including accounting professionals/auditors, management of organizations and the academia.

LITERATURE REVIEW

Accounting is the process of communicating financial information about a business entity to users. The communication according to Barry and Elliot (2004) is generally in the form of financial statements that show in monetary terms, the economic resources under the control of management. According to Goodyear (1913), accounting has principles which are applied to business entities in three divisions of practical art, namely: accounting, bookkeeping and auditing. Today, accounting is called "the language of business'' because it is the only means of reporting financial information about a business entity to many different groups of people.

Automated Accounting system is the application of Information Technology in accounting which is similar to e-mail being an electronic version of traditional mail. Automated accounting is "electronic enablement" of accounting processes which were traditionally manual and paper based. It involves performing regular accounting functions through computers and the use of various accounting software packages. The accounting principles and concepts are the same with differences lying in the mechanics of the process. It is the use of electronic means to perform accounting functions, including payroll, income and expenses, budgeting, tax returns and preparation of financial statements. An understanding of automated accounting's roots prepares individuals for what dynamic changes may lay ahead as the International Reporting Standard (IRS) first accepted e-filing of tax returns in 1986 as accounting software has become user friendly and it is no longer requires years to prepare budgets, financial statements and tax returns. Good accounting program should therefore conform to Generally Accepted Accounting Principles (GAAP).

Auditing on the other hand has been generally defined as the evaluation of a person, organization, system, process, enterprise, project or product. Auditing is performed to ascertain the validity and reliability of information and also to assess the internal control system. The goal of an audit according to Kramer, Douglas and Vicky (2009) is to express an opinion of the person or organization in question, under evaluation based on work done on a test basis. According to Frielink (1959), auditing is a systematic examination of the books and records of a business or an organization in order to ascertain or verify and to report upon the facts regarding the financial operations and the results there of. Harry (1982) also opined that an audit is an examination of accounting records, undertaken with a view to establishing whether they correctly and completely reflect the transactions to which they relate.

Robin, Peter and Perter (1982) argue that an audit may be an examination of the books, accounts and voucher of a business to enable the auditor to satisfy that the balance sheet is properly drawn up so as to give a true and fair view of the state of affairs of the business and whether the profit or loss for the financial period according to the best of his information and the explanation given to him and as shown by the books, show the fair financial position of the organization. Further more, ICAN (2006) defines audit as an independent appraisal process often govern by statute, for examining, investigating and verifying the financial statements of an organization by a person competently appointed.

It is clear from the above definitions that auditing is the systematic and scientific examination of the books of accounts and records of a business so as to enable the auditor to satisfy himself that the balance sheet and the profit and loss accounts are properly drawn up in order to exhibit a true and fair view of the financial state of affairs of the business and profit or loss for the financial period. The auditor will have to go through various books and accounts and other related evidence to satisfy him about the accuracy and authenticity to report the financial health of the business. It is no doubt a systematic process of objectively obtaining and evaluating evidence regarding assertions about economic actions and events to ascertain the degree of corresponded between those assertions and established criteria and communicating results to interested users.

Due to constraints, an audit seeks to provide only reasonable assurance that the statements are free from material error. Hence, statistical sampling is often adopted in audits. In the case of financial audits, a set of financial statements (statement of financial position or balance sheet, profit and loss account, statement of changes in equity, statement of cash flow and in some cases, notes to the financial statements) are said to be true and fair when they are free of material misstatement (Pricewaterhouse, 1956).

Major Processes of an Audit

Lanz and Patrisso (2004) have broken down audit processes into a number of audit phases. According to them, these phases are sequential, interactive and interrelated in nature. They argue that the phases often include procedures designed for one purpose that provide evidence for other purposes, and sometimes procedures accomplish purposes in more than one phase. These phases or processes are: accepting a new client or confirming the continuance of a current client; planning an audit; gathering audit evidence; completing the audit; and reporting.

Accepting a New Client or Confirming the Continuance with the Current Client

Professional standards require that audit firms establish policies and procedures for deciding whether to accept new clients or to retain current clients (Philippsohn, Thomas and Philippsohn, 2003). They are of the view that the purpose of such policies is to minimize the likelihood that an auditor: will be associated with clients of whom the auditor is not independent; lacks integrity; or accepts an engagement which they do not have the skill or competence to perform. What the auditor should consider when deciding to accept a new client or whether to continue with a current client?

If an auditor is not independent of a client, it can lead to non-compliance with ethical requirements, as well as bad publicity. If an auditor is associated with a client who lacks integrity or the auditor does not have the skill and competence to perform the audit, Wright, Liu and Freedman (2008) say there are increase risks that material misstatements may exist and not be detected by the auditor. This can lead to lawsuits being brought against the auditor by users of the financial statements.

Mohay, Anderson, Collier, DeVel and McKemmish (2003) suggest that for a prospective new client, auditors would ordinarily confer with the predecessor auditor or knowledgeable third parties, and conduct background checks on top management. The knowledge that the auditor gathers during the acceptance/continuance process is not as in-depth as when later gaining an understanding of the entity and its environment, to assess risk and plan the audit (Philippsohn et al, 2003). However, the knowledge obtained during the engagement activities should be sufficient to make an informed decision whether or not to accept a client.

Planning an Audit

Auditing standards require the audit to be properly planned. According to Owojori (2001), this is to ensure that the audit is conducted technically and professionally. It further argued that planning involves all the issues the auditor should consider to develop an overall audit strategy and audit plan for conducting the audit. Therefore, the outcome of the auditor's planning process is a written plan that sets forth the overall audit strategy and the nature, extent, and timing of the audit work.

Owojori and Asaolu (2009) say, this process begins with obtaining sufficient knowledge of the entity, including its internal control system. With this knowledge the auditor is able to identify risk of material misstatement which affects the calculation of planning materiality. After performing all these procedures, the auditor is able to develop the overall audit strategy and the detailed audit plan.

An integral part of planning that is not referred to in any standards, is general administration, for example, scheduling team members, arranging travelling and lodging for the audit team if so required, and communicating deadlines with the client. According to Jeffrey and Joyce (2005), if the audit is not properly planned, the auditor may conduct an inefficient audit or issue an incorrect audit report.

Audit Evidence

Audit evidence may be described as evidence obtained during a financial audit and recorded in the audit working papers. Audit working papers are documents which records all audit evidence obtained during financial auditing, management auditing or investigations. They are used to support the audit work in order to provide an assurance that the audit was performed in accordance with the relevant auditing standards. In the audit engagement acceptance or reappointment stage, audit evidence is the information to be considered by the auditor for appointment and also relevant through out the other stages of the audit assignment. It is all the information used by the auditor in arriving at the conclusions in which the audit opinion is based. It includes the information contained in the accounting records underlying the financial statements and other information.

Gathering Audit Evidence

After the auditor has planned the audit, the auditor, Owojori and Asaolu (2009) believe that the auditor needs to gather sufficient appropriate audit evidence on which to base his/her audit opinion. The auditor according to them gathers evidence by performing audit procedures. These audit procedures consists of test of controls and substantive procedures.

METHODOLOGY

The population for the study comprises of the entire staff of the selected companies: MTN, Globacom, Cadbury and Unilver; and the entire staff of the four audit firms: PricewaterhouseCooper (PWC), Klynveld Peat Marwick Goerdeler (KPMG), Deloitte and Akintola Williams. Purposive sampling method was used. This method was adopted in the selection of the economic sectors (manufacturing and telecommunication sectors) and the companies (MTN and Glo in telecommunication; Cadbury and Unilever in manufacturing). The four audit firms were selected purposively being the auditors of these companies. However, the respondents (staff) of these companies and audit firms were selected using random sampling method.

The study used primary source of data. Data were collected through questionnaire administration on the respondents. A total of one hundred and sixty (160) questionnaires were administered. Twenty (20) questionnaires were administered on each of the selected companies and audit firms.

The study used Product Moment Correlation Coefficient (PMCC) to test the hypotheses because it measures effectively, the strength of relationship between two variables (Mark, Philip and Adrian, 2003). The PMCC is given by Adefila (2008) as:

$$r_{xy} = \frac{n\sum xy - \sum x \sum y}{\sqrt{(n\sum x^2 - (\sum x)^2)(n\sum y^2 - (\sum y)^2)}}$$

Where:

r = correlation coefficient
x = independent variable (automated data capturing system)
y = dependent variable (audit planning and gathering of audit evidence)
r_{xy}= correlation coefficient of x and y

For this study, automated data capturing system is the independent variable (x) while audit planning and gathering of audit evidence are dependent variables (y).
Note: The level of significance is 0.05.

RESULTS

Testing the first hypothesis (H_{O1}) which stated that "there is no significant relationship between automated data capturing system and audit planning", the result obtained by substituting the variables in the Product Moment Correlation Coefficient formula was as follows:

$$rxy = \frac{5(4716) - (138 * 138)}{\sqrt{(5 * 5852 - (138)^2)(5 * 8481 - (138)^2)}}$$

r = 0.1

With r = 0.1, it implies that a weak positive relationship exists between the two variables (automated data capturing system and audit planning). As a result, the null hypothesis cannot be rejected.

For the second hypothesis (H_{O2}) which stated that "there is no significant relationship between automated data capturing system and gathering of audit evidence", by substituting the variables in the formula the result showed:

$$rxy = \frac{5(5982) - (138 * 138)}{\sqrt{(5 * 5852 - (138)^2)(5 * 7602 - (138)^2)}}$$

r = 0.2

With r = 0.2, it also implies a weak positive relationship between the two variables (automated data capturing system and audit evidence) and as a result, the null hypothesis cannot be rejected.

The impact of automated financial accounting system on audit processes has been positive. Almost all respondents irrespective of their economic sector, education background and working experience are of the view that automated accounting system has positively impacted on audit processes. This is in line with empirical studies including Pathak (2006) which posits among others that there is a positive relationship between auditing and electronic system of accounting and commerce.

Bansal and Sharma (2001) in their study also argued that absence of vouchers (or verifying documents by means of electronic) does not cause much difficulty in audit as there are many techniques available to help auditors in verifying e-transactions and finding out any manipulations done in them. In the same vein, Al-

Bashtawi and Al-Husban (2009) in their study whose objectives were to identify the obstacles that limit audit procedures necessary to audit computerized accounting information systems.

CONCLUSION

The study concludes that audit processes in e-environment is challenging as a result of accounting system adopted. This is due to the fact that most of the accounting and financial documents are maintained in e-form. These records which need to be thoroughly scrutinized by auditors in order to perform an acceptable exercise and form a reliable and an independent opinion but this may be difficult to carry out than when the documents are maintained manually.

In addition, impact of automating financial accounting system on audit processes has not been negative as the system does not hide vital documents for auditors, necessary documents can be verified by auditors and auditors still have access to accounting books and records. Also, fraud and irregularities can still be detected and financial records can be traced when kept electronically. Moreover, auditors have a wide range of techniques to use including CAATs and non electronic records could as well be used checked in order to validate e-records.

Finally as Leigh (1980) noted that everything in the world today has been affected by technology, accounting in particular has been affected to the highest degree. There is less paper work and less guesswork. Accounting software has made accounting much easier to deal with and financial statements are produced in a very short period.

REFERENCES

Adefila, J.J. (2008.) Research Methodology in Behavioural Sciences. Kaduna, Nigeria: Apani publication.

Al-Bashtawi, S.H., and Al-Husban, A. (2009). Determinants of Auditing Electronic Information System, Journal of the Faculty of Jordan University, Vol. 9, Issue 2009

Bansal, A. and Sharma, A. (2001). New Challenges of Accounting: Auditing in E-Environment in India, Auditing Journal. Vol. 14, Issue 7, 2001

Barry, E. and Elliot, J. (2004). Financial Accounting and Reporting. London: Prentice Hall, ISBN 0-273-70368-1.P.3

Frielink, A.B. (1959). Automatic Data processing, Elsevier Publishing Company, Netherlands.

Goodyear, L. E. (1913). Principles of Accountancy, Goodyear- Marshall Publishing Co., Cedar Rapids, IOWA, P.7.

Harry, W. (1982). Breakthrough to Computer Age. New York: Charles Scribner & Sons.

ICAN Study Pack (2006). Public Sector Accounting. Lagos: VI Publishers.

Jeffrey, W. S. and Joyce, A. S. (2005). Financial Accounting and Reporting. Sixth Edition. USA: Thomson Custom Publishing. PP15.

Kramer, G. P., Douglas, A. B. and Vicky, P. (2009). Introduction to Computerized Accounting, 7th ed., Upper Saddle River, NJ: Pearson Prentice Hall.

Lanz, J. and Patrisso, E.M. (2004). Unmasking IT Fraud, Practical Applications of SAS-99, Bank Accounting & Finance, Available at: http://www.itriskmgt.com/downloads/articles/April%202004%20-%20BAF%20-%20IT%20Fraud%20SAS%2099.pdf.

Leigh, F.G. (1980). Guidelines for Security of Computer Applications, Federal Information Processing Standard Publication No 73.

Mohay, G., Anderson, A., Collie, B., DeVel, O. and McKemmish, R. (2003). Computer and Intrusion Forensics. Norwood, MA, Artech House Inc.

Mark, S., Philip, L. and Adrian, T. (2003). Research Methodology for Business Students, 3rd edition. England: Pearson Education Limited.

Owojori, A. A. (2001). International Accounting. Lagos: Kaycee Publishers.

Owojori, A.A. and Asaolu, T.O. (2009). Comparative International Audit and Audit Practices, available at http://www.eurojournals.com/Africa.htm

Pathak, J. (2006). Audit Resource Planning Success in B2B E-Commerce Engagement: An Empirical Assessment of Theorized Constructs, Manifest Variables Measurement and Second Order Factor Model, Paper No. 899040, online available: (www.ssrn.com)

Philippsohn, S., Thomas, S. and Philippsohn, C. (2003). E-Fraud-What Companies Face Today. Computer Fraud Security, 1: 7-9.

Pricewaterhouse & Co. (1956). The Auditor Encounters Electronic Data Processing, IBM Corp; New York.

Robin, B., Peter, D. and Perter, L. (1982). The Beginners Guide To computers, Addition Wesley Publishing Co. Reading Mass

Wright, C., Liu, D. and Freedman, B. (2008). The IT Regulatory and Standards Compliance Handbook: How to Survive an Information Systems Audit and Assessments. Burlington, MA: Syngress Publishing Inc.