



ELECTRONIC ACCOUNTING A TOOL FOR QUALITY MANAGEMENT OF SMALL AND MEDIUM SCALE ENTERPRISES (SMEs) IN THE 21ST CENTURY NIGERIA

UDEGBUNAM, EMMANUEL OBIDI

*Vocational Education Department
NnamdiAzikiwe University, Awka.
uemmanuelobidi@yahoo.com*

UCHENU, CHIMEZIE ADA

*Anambra State Polytechnic, Mgbakwu.
chimezieuchenu@gmail.com*

**ODIMMEGA, CHINYEREGENEVIVE &
MACPHERSON, CHUKWUDI NWOGU**

*Department of Vocational Education,
NnamdiAzikiwe University, P.M.B. 5025,
Awka, Anambra State, Nigeria
chniyere_odimmega@yahoo.com
mcnwogu@gmail.com*

Abstract

The study was carried out to assess electronic accounting a tool for quality management of small and medium scale enterprises in the 21st century Nigeria. Two research questions guided the study and two null hypotheses were tested at 0.05 level of significance. A descriptive survey research design was adopted for the study. The population consisted of 3836 small and medium scale enterprise accountants and a sample size of 384 was taken. A structured questionnaire was used for data collection. The instrument was validated by three experts. The reliability of the instrument was ensured using pilot test technique. Data collected were analyzed using Cronbach Alpha formula which yielded reliability co-efficient of 0.84. Data related to the research questions were analyzed using mean and standard deviation while the z-test analysis was used to test the null hypotheses at 0.05 level of significance. Findings arising from the study revealed that the uses and benefits of electronic accounting tool in the management of small and medium scale enterprises in 21st century in Anambra State were highly rated. Findings also indicated that there was a significant difference in the mean responses of accountants in small and medium scale enterprises on the uses and benefits of electronic accounting tool in the management of SMEs in the 21st century. It was recommended among others that accounting training institutions should incorporate the study of electronic accounting systems as part of their courses to ensure that accountants are equipped with both accounting knowledge and the required information technology skills.

Keywords: Electronic accounting, electronic accounting tools and small and medium scale enterprises, 21st century.

Introduction

Technology plays a key role in today's business environment. Every business, regardless of its size has to be effectively and successfully managed for it to survive, grow and remain sustainable. In today's business world, many companies greatly rely on technology to provide accurate information for their effective management. Thus, it has become increasingly necessary for all businesses to incorporate information technology solutions to operate successfully (Soudani, 2013)). Information technology and systems have tremendous impact on the productivity and performance of small and medium scale enterprises. Small and medium scale enterprises (SMEs) are the building blocks of any growing economy. Some of the roles of small and medium scale enterprises include employment generation, rural development, youth empowerment, contribution to national growth, spread and development of adaptable



technology and regional balanced growth channel. These enterprises are faced with diverse problems in Nigeria due to numerous domestic and global economic problems and policy inconsistencies.

With globalization, the operating environment of businesses is continuously becoming complex and competitive. Most businesses strive for competitive advantage over their competitors. Coping with these complex and dynamic business environments, both small and large enterprises require continuous adoption and innovation in the deployment of emerging technologies and management concepts (Ndekwa, 2014). Information and Communication Technology (ICT) is regarded as a vital tool for the efficient administration of any organization's transaction and in the delivery of business services to its clients. Realizing that ICT is a major source of competitive advantage as well as a cost effective way for SMEs to reach customers globally and to compete with their counterparts globally. The growth of computer technology had initiated increasing development in information storage and processing.

Computer technologies increase the use of information due to its capabilities for analyzing massive amount of data and for producing accurate and timely reports. These unique features of computer capabilities have led to the introduction of various information systems/tools such as Accounting Information System (AIS), Manufacturing Resource Planning (MRP) system, Human Resource (HR) System. Information technology system has definitely changed the way businesses are operated (Elliot in Azih, 2013). This system/tool has contributed to increases in business productions and transactions as firms are better positioned to achieve their objectives. With increase in businesses and transactions, there will be more accounting data needed to be recorded and updated.

Accounting is an important part of any business and it plays a critical role in the success or failure of contemporary business enterprises. Accounting is the process of recording, classifying, summarizing, analyzing and interpreting financial transactions and communicating the results thereof to interested users (Chukwu in Azih, 2013). Maintaining a proper accounting system ensures the accuracy of a company's financial statements. Tarakolian in Amidu, Effa and Abbur (2011) observed that prior to the advent of personal computers; businesses were limited to manual methods for keeping track of financial data. The manual accounting system consisted of paper ledgers, typewriters and calculators. Amidu et al further stated that the invoices and cheques were typed using the typewriters while the calculations were performed using the calculators. With the use of this method, errors were easily introduced into the data without being detected. To reduce the incidence of poor recording of transactions electronic accounting was introduced.

Electronic accounting is a term used to describe an accounting system that relies on computer technology for capturing and processing financial data in organizations. Electronic accounting according to Yukcu and Gomen (2012) involves the documentation, tracking, recording, archiving and summarizing of transactions and events associated with a business entity as well as presenting related summary information to a business entity's interest groups in an electronic environment. Gulkist in Moorthy, Seetharaman, Gopalanand San (2010) defined electronic accounting as an



accounting system where transactions, accounting entries and data are received, transferred and stored electronically.

In addition, electronic accounting involves performing regular accounting functions, accounting research and accounting training and education through various computer/internet based accounting tools such as digital tool kits, various internet resources, international web based materials, institute and company databases which are internet based, web links, internet based accounting software and electronic financial spreadsheet tools to provide efficient decision making (Memis, 2011). It was observed by Gulkvist in Morthy et al (2010) that there has been resistance towards electronic accounting by accountants and auditors who feel comfortable using the traditional system. The reason behind this attitude can be attributed to the quality of training received by the accountants and auditors.

However, electronic accounting is dependable on availability of relevant tools/software to include peachtree accounting, quick books, Dac easy or window, MS Money (financial management software), Eagle tracks for inventory management, MYOB Accounting, Sages accounting software, Budgetmatic software for budgeting and budgetary control, Sun system software, tally accounting, fund manager and web based accounting (Adejola, 2012). Accounting software is an application software that records and processes accounting transactions within functional modules such as accounts payable, accounts receivable, payroll, and trial balance (Ware, 2015). Thus, these software packages allow the whole accounting system to be run on a computer.

The electronic accounting is designed to automate and integrate all the business operations and helps the company handle all the business processes easily and cost-effectively. With electronic accounting, the company will have greater visibility into the day-to-day business operations and greater access to vital information automatically (Wang & Huynh, 2012). It has the ability to handle huge volumes of transactions with speed or efficiency, streamline workflow, abridge data redundancy and error reconciliation, and help with financial management for small and medium scale businesses. The many advantages from the use of these systems have led many to conclude that electronic accounting systems in corporate reporting are the 'engine of growth' in business organizations. It appears that the uses of electronic accounting softwares in most small and medium enterprises in Anambra State is in doubt and thus compound their challenges (Adejola, 2012). In view of this, because of complexity, globalization, it demands that operators of SMEs should make the adoption of computerized accounting system for its trading and other financial activities possible

Electronic accounting system provides various benefits to small and medium scale businesses. Rush in Ayiri and Kudzanayi (2017) suggested various benefits accruing to an organization if it uses electronic accounting systems. The system automatically verifies account numbers and rejects data that does not comply with prescribed criteria, missing cheques or vouchers are immediately evident, tedious recording processes are automated, a variety of reports can be quickly generated on demand, managers can query the system for ad hoc information, data processing and analysis are faster and more accurate and managers must identify and solve problems. According to Vertmaat and Shelly (2011), society has reaped many benefits from



using computers. Both business and home users can make well informed decisions because they have instant access to information from anywhere in the world. With computerized accounting the operators or managers of SMEs will have greater visibility into the day-to-day business operations and greater access to vital information automatically (Wang &Huynh, 2012). It has the ability to handle huge volumes of transactions with speed or efficiency.

Furthermore, factors influencing the utilization of electronic accounting as a tool for quality management of SMEs in the 21st century could be size of small and medium scale enterprises. Small and Medium Sized Development Agency of Nigeria (SMEDAN) defined SMEs based on the following criteria: a micro enterprise as a business with less than 10 people with an annual turnover of less than ₦5,000,000.00 (€22,896,35); a small scale enterprise as an enterprise with total capital employed of over ₦1.5million (€6,916.77) but not more than ₦50million (€228,469.28) including working capital but excluding cost of land and labour size of 11 – 100 workers; a medium scale enterprise as an enterprise with a total capital employed of over ₦50million (€228,469.28) but not more than ₦200million (€922,289.89) including working capital but excluding cost of land, and or a labour size of 101 – 300 workers. Fagbemi and Olaoye (2016) observed that the adoption of a computerized accounting information system improves the ability of small and medium scale enterprises to secure funds from financial institutions. It increases the speed and accuracy of financial report of SMEs, and ultimately improves the reliability of the reports. Oladipupo and Ajape(2013) opined that the use of computer-based accounting system (CBAS) by Nigerian SMEs is highly significant as companies use one type of accounting software or another irrespective of the ownership and size.

Despite the impact of ICT, SMEs seem to be very slow in adapting to the great resources. The accounting system of most SMEs fail to include the knowledge of modern accounting packages like micro soft excel, micro soft access, sage accounting and peach tree accounting (Azih, 2010). This creates a gap on the business performance of SMEs and the demands of the labour market. The introduction of electronic accounting into the SMEs is pertinent because of the benefits enjoyed by the users of the accounting system/tool.

Statement of the Problem

There appears to be an under-utilization of electronic accounting softwares by accountants in SMEs. Adejola (2012) noted that under-utilization of electronic accounting softwares/tools by SMEs was as a result of unavailability of the softwares/tools, lack of qualified staff with electronic accounting ability, lack of electronic facilities and infrastructure, inadequate training and retraining of accountant/staff to acquaint them with the development of new technologies, among others. The current trend in information technology stresses on the need for an organization to maintain paperless offices where accounting officers are expected to record, store and retrieve accurate data using paperless accounting systems. This can only be achieved with the introduction and use of electronic accounting in SMEs.

The non introduction of e-accounting in SMEs could be as a result of not having much awareness of the uses and benefits of computer technology in



accounting. The researchers therefore tried to ascertain the extent of use and benefits of electronic accounting tools for quality management by small and medium scale enterprises in the 21st century in Anambra State.

Purpose of Study

The main purpose of this study was to ascertain the use of electronic accounting tools for quality management of small and medium scale enterprises in the 21st century in Anambra State. Specifically, the study determined the:

1. Uses of electronic accounting in the management of small and medium scale enterprises in the 21st century.
2. Benefits of using electronic accounting in the management of small and medium scale enterprises in the 21st century.

Research Questions

The following research questions guided the study:

1. What are the uses of electronic accounting tools in the management of small and medium scale enterprises in the 21st century in Anambra State?
2. What are the benefits of electronic accounting tools in the management of small and medium scale enterprises in the 21st century in Anambra State?

Hypothesis

The following null hypotheses were tested at 0.05 level of significance:

1. There is no significant difference on the mean responses of accountants on the uses of electronic accounting tools by SMEs in the 21st century on the basis of size of enterprise.
2. There is no significant difference on the mean responses of accountants on the benefits of using electronic accounting tools by SMEs in the 21st century on the basis of size of enterprise.

Method

Descriptive survey research design was adopted for the study. The researchers considered this design appropriate for the study since it collected data from accountants of SMEs enterprises in Anambra State. The population of the study consisted of 3836 small and medium scale company accountants in the three senatorial zones of Anambra State who registered with the State Ministry of Commerce, Industry and Technology (2191 small and 1645 medium). The sample of this study comprised 384 accountants (made up 219 small and 165 medium accountants) were selected through randomization from each stratum. Instrument for data collection was a structured questionnaire titled "Electronic Accounting Tools for Quality Management of Small and Medium Scale Enterprises Questionnaire (EATQMSMSEQ)". The instrument was validated by three experts in business education. Their comments enhanced the content validity of the instrument.

A reliability co-efficient of 0.84 was established using Cronbach Alpha Co-efficient Method. The questionnaire was structured on a five-point rating scale with response categories as "Strongly Agree"; "Agree"; "Moderately Agree", "Disagree" and "Strongly Disagree". Out of 384 copies of questionnaire distributed personally by the researchers with the help of research assistants, 366 copies were retrieved and use



for data analysis. The data collected were analyzed using descriptive statistics (mean and standard deviation), while the z-test was used to test the hypotheses. In order to determine the uses and benefits of electronic accounting tools in the management of SMEs, a decision rule based on a mean rating between 4.50-5.00 to strongly agree, an item with mean rating of 3.50-4.49 to agree and an item with 2.50-3.49 was moderately agree. Furthermore, items with mean rating of 1.50-2.49 and 0.50-1.49 to disagree and strongly disagree respectively. In testing the null hypotheses, where the calculated p-value is less than the stipulated level of significance (0.05), it means that there was significant difference and the hypothesis was rejected. Conversely, where the calculated p-value is equal to or greater than the stipulated level of significance (0.05), it means that there was no significant difference and the hypothesis was not rejected.

Results

Research Question 1

What are the uses of electronic accounting tools in the management of small and medium scale enterprises in the 21st century in Anambra State?

Table 1: Mean ratings of company accountants on the uses of electronic accounting tools in the management of SMEs.

N= 366

S/No	Uses of e-Accounting tools	Mean	SD	Decision
1.	Preparation of accounts payable	4.39	.49	Agreed
2.	Calculation of amounts for accounts receivable	4.30	.46	Agreed
3.	Computation of tax return	4.49	.50	Agreed
4.	Preparation of payroll	4.71	.46	Strongly Agreed
5.	Preparation of financial accounts and reports	4.61	.49	Strongly Agreed
6.	Writing up of bank reconciliation statements	4.30	.46	Agreed
7.	Identify customer and supplier account balances	4.49	.50	Agreed
8.	Forecast future performance of the organization	4.71	.46	Strongly Agreed
Cluster Mean		4.50		Strongly Agreed

As displayed in Table 1, the cluster mean of 4.50 showed that accountants of SMEs rated the uses of electronic accounting tools in the management of SMEs in the 21st century in Anambra State as strongly agreed. The item by item analysis shows that items 4, 5 and 8 with mean ratings ranging from 4.61 to 4.71 are the uses of electronic accounting tool rated as strongly agreed. Items 1, 2, 3, 6 and 7 with mean ranging from 4.30 to 4.49 are the uses of electronic accounting tool rated as agreed. The standard derivation which falls between 0.49 to 0.50 showed that accountants in SMEs are not different in their responses which indicate homogeneity.

Research Question 2

What are the benefits of electronic accounting tools in the management of small and medium scale enterprises in the 21st century in Anambra State?



Table 2: Mean ratings of company accountants on the benefits of electronic accounting tools in the management of SMEs. N= 366

S/NO	Benefits of e-Accounting tools	Mean	SD	Decision
9	Timely information management	4.39	.49	Agreed
10	Large storage capacity	4.40	.49	Agreed
11	Reduction of volume of work and improved productivity	4.51	.50	Strongly Agreed
12	Reduced transaction costs and higher information quality	4.61	.49	Strongly Agreed
13	The system automatically verifies account numbers and rejects data that does not comply with prescribed criteria	4.19	.40	Agreed
14	Data processing and analysis are faster and accurate	4.39	.49	Agreed
15	A variety of reports can be quickly generated on demand	4.71	.46	Strongly Agreed
16	Tedious recording processes are automated	4.30	.46	Agreed
17	Better management of cash as a result of efficient payments and collection systems	4.29	.46	Agreed
18	Provision of multi-user and multi-site access	4.51	.50	Strongly Agreed
Cluster Mean		4.43		Agreed

The data in Table 2 shows that items 11, 12, 15 and 18 have mean ratings ranging from 4.51 to 4.71 as the benefits of electronic accounting tools are rated as strongly agreed. Items 9, 10, 13, 14, 16 and 17 have mean ratings ranging from 4.19 to 4.30 are rated as agreed. The cluster mean of 4.43 shown indicates that the benefits of electronic accounting tools in the management of SMEs in the 21st century Anambra State are rated as agreed. The standard derivation which falls between 0.40 to 0.50 showed that accountants in SMEs are not different in their responses which indicate homogeneity.



Testing the Hypotheses

Null Hypothesis 1

There is no significant difference on the mean responses of accountants in SMEs on the uses of electronic accounting tools by SMEs in the 21st century on the basis of size of enterprise.

Table 3: Summary of z-test comparison of the mean responses of accountants in SMEs on the uses of electronic accounting tools by SMEs in the 21st on the basis of size of enterprise.

Size of the Firm	N	\bar{X}	SD	Df	z-cal	P-value	Decision
Small Scale Enterprises	2094	54	.19	364	2.69	.01	Significant
Medium Scale Enterprises	1574	45	.12				

Table 3 shows that there was a significant difference in the mean responses of accountants in SMEs on the uses of electronic accounting tools by SMEs in the 21st century on the basis of size of enterprise. This was shown by the z-cal value of 2.69 and the p-value (.01) which was less than the stipulated 0.05 level of significance. The null hypothesis of no significant difference between the two groups is therefore was rejected.

Null Hypothesis 2

There is no significant difference on the mean responses of accountants SMEs on the benefits of using electronic accounting tools by SMEs in the 21st century on the basis of size of enterprise.

Table 4: Summary of z-test comparison of the mean responses of company accountants on the benefits of electronic accounting tools by SMEs in the 21st on the basis of size of enterprise.

Size of the Firm	N	\bar{X}	SD	Df	z-cal	P-value	Decision
Small Scale Enterprises	2094	45	.05	364	5.42	.00	Significant
Medium Scale Enterprises	1574	41	.02				

As shown in Table 4, there is a significant difference in the mean responses of accountants in SMEs on the benefits of electronic accounting tools by SMEs in the 21st century on the basis of size of enterprise. This was shown by z-cal value of 5.42 and the p-value (.00) which was less than the stipulated 0.05 level of significance. Therefore, the null hypothesis of no significant difference between the two groups was rejected.

Discussion of Findings

The study revealed that accountants in SMEs rated the uses of electronic accounting tools in the management of SMEs in the 21st century in Anambra State as strongly agreed. These results agreed with the views of Wang and Huynh (2012) who



stated that with electronic accounting, the SMEs will have greater visibility into the day-to-day business operations and greater access to vital information automatically. Also Amidu, Effah and Abbur (2011) stated that accountants use the electronic accounting tools for accounts receivables functions as well as accounts payables, inventory management, payroll, general ledger, fixed assets management, bank reconciliation and cash management. Furthermore, the result of the first hypothesis revealed that accountants in SMEs differed significantly in their mean ratings on the uses of electronic accounting in the management of SMEs in the 21st century in Anambra State. This was in agreement with Oladipupo and Ajape (2013) who opined that the use of computer-based accounting system (CBAS) by Nigerian SMEs is highly significant as companies use one type of accounting software or another irrespective of the ownership and size.

The study also revealed that accountants in SMEs rated the benefits of electronic accounting tools in the management of SMEs in the 21st century in Anambra State as agreed. The findings of this study is support with the findings of Amanamah, Morrison and Asiedu (2016) who stated that electronic accounting systems play an important role in order for SMEs to achieve their objectives such as timely information management, large data storage capacity, reduction of clerical works and enhanced customer satisfaction. The test of the second hypothesis revealed that there was a significant difference in the mean responses of accountants in SMEs on the benefits of electronic accounting tools by SMEs in the 21st century on the basis of size of enterprise.

Conclusion

Based on the findings of the study, it was concluded that usage of electronic accounting by small and medium scale enterprises has the potential to improve their performance in financial reporting of activities in the organization. It would also ensure proper accounting practices as good accounting practices have several implications for entrepreneurs and SME managers. Good accounting and control systems could assist in evaluating the performance of the organization and its managers. SMEs with proper books of accounts are often capable of attracting external financing easily than those with no good records.

Recommendations

Based on the findings and conclusions of the study, it was recommended that:

1. The Government, through the Ministry of Trade and Industry should provide an enabling environment to help SMEs computerize their accounting function.
2. Small and medium scale enterprises in Anambra State need to adhere to good and standard accounting practices in their operations.
3. Accounting training institutions should do well to incorporate the study of Electronic Accounting Systems as part of their courses to ensure that accountants are equipped with both accounting knowledge and the required information technology skills.



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