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Effect of Adopting Computerized Accounting Systems on the Growth of Micro and Small Enterprises: Analyses from the Southeast Region of Nigeria

Uche Peter Nsoke, PhD

Department of Accountancy,
School of Business and Management Sciences,
Maduka University, Ekwegbe-Nsukka, Enugu State, Nigeria

npetuche@gmail.com; +2348037212023

Abstract

Research Objectives: This study examined the effect of adopting computerized accounting systems on the growth of micro and small enterprises (MSEs) in the South East region of Nigeria. The study adopted survey research design. Micro and small scale enterprises in South-East geopolitical zones in Nigeria formed the population of the study.

Methodology: The study made use of primary data. Questionnaire was an instrument for data collection. A sample size of 384 was adopted using Bill Godden sample size formula. Proportional stratified random sampling technique was employed to distribute this 384 to MSEs. It focused on responses from owner-manager and employee managers of MSEs. The data was tested using percentages, mean, and standard deviation, while the hypothesis was tested using regression analysis and analysis of variance.

Conclusion: The adoption of computerized accounting systems has a significant effect on MSE growth in Nigeria.

Recommendation: MSEs to adopt computerized accounting systems in their business operations to ensure accuracy, speed and growth.

Key words: *Computerized Accounting systems, Growth, Micro and Small Enterprises, South-East Nigeria.*

1. Introduction

In Nigeria and worldwide, micro and small enterprises (MSEs) play vital roles in the process of industrialization, sustainable economic growth and development (Ariyo, 2005); encourages entrepreneurship and generation of employment, reduces poverty and contributes to the Gross Domestic Products (GDP) of many countries (Audretsch, 2010; Okafor, 2018; & Rogers, 2002). MSEs play vital roles through innovation and production of various goods and services which

empower the process of economic development. In developing countries like Nigeria, where unemployment has become a worrisome issue, governments as well as individuals resort to establishment of small scale businesses for survival. Small business entrepreneurs provide capital by themselves through family help, personal savings, or through borrowing, et cetera. In some situations, governments promote the financing of micro and small enterprises by providing non collateral micro loans to individuals and micro enterprises through micro finance institutions.

In most countries of the world, if not all, there is a tremendous proliferation of MSE businesses such as supermarkets, poultry farming, fish farming, production of animal feeds, kiosks, computer services, carpentry works, barbering and hairdressing salons, sachet water production, manufacturing of soaps, powder, pomade and detergents, restaurants, car wash, shoe production and the rest of them. In the South-East geopolitical region of Nigeria for instance, MSEs have out-numbered all other forms of businesses and could be found in almost every part of the area (Ezejiofor, et al, 2014). To many MSE businesses, it has been a success while to some, a failure. Many studies have identified several causes of such failures. Previous study also reveals that careless or poor financial management practices constitute failures in small scale enterprises (Okafor 2012). Furthermore, Manfo-Yiadom and Kweku (2006) identify lack of demand, shortage of working capital and poor accountability as the main reasons for small business closures in Africa. The failures and some problems mitigating the growth of many business enterprises worldwide have led to the innovation and application of accounting technology that enhances their operations which computerized accounting systems is one of them. In this study, the objective is to examine if the adoption of computerized accounting systems contribute to the growth of micro and small enterprises.

2. Review of Related Literature

2.1 Conceptual Review

2.1.1 Meaning of micro and small enterprises

The concept of micro and small scale enterprises (MSEs) have been used to describe business entities with a certain amount of turnovers, assets, and the number of employees (Ilemona, 2011). The definition of MSEs varies from country to country and from agencies to agencies. As a result, there has not been any acceptable definition of MSEs over time. In Nigeria for instance, the National Policy on Micro, Small and Medium Enterprises {MSMEs} (2014) revised gave definition according to size, employees and asset base. The definition defined micro enterprises as an organization with employees less than ten(10) and asset base less than five million (N5,000,000.00) naira excluding land and buildings while small scale enterprise is defined as organization whose employees are between ten and forty-nine (10-49), and its Assets falls between five million to fifty million naira (N5m-N50m) excluding land and building.

In the case of the United Kingdom (UK), there is no single agreement on what should be the definitions of micro, or small enterprises. However, the UK's office for National Statistics (ONS) and by most government departments in the country defined micro, small and medium enterprises (MSMEs) based on the number of employees only (Izza, 2014). According to the UK's ONS, a micro business is one with a maximum of nine (9) employees while a small business is one which has employees between ten and forty-nine (10-49). The United States (US) defined micro enterprises as small businesses employing nine (9) people or fewer, e.g. started for $50,000 or less in initial capital and that may not have access to traditional commercial loans. Small businesses are generally those with fewer than 50 employees but more than 9 (US Small Business Administration, 2014).

2.1.2. Computerized Accounting Systems and the Growth of MSEs

Prior to the era of industrial revolution, the traditional accounting system of manually recording and processing daily transactions was in use. However, as the wind of industrialization grows, the operators of small businesses found it difficult continuing with the traditional manual systems. Errors such as wrong entry, under and over-casting, complete omission of some transactions due to high volume of financial transactions, inefficient task performance as well as incomplete records, etc created many problems for business organizations. As a result, the challenges facing small businesses increased due to stiff competitiveness and most times, policy inconsistencies. Then arises the need to overcome the above challenges. The process to overcome the challenges facing small businesses day by day led to the emergence of computerized accounting systems. Computerized accounting system (CAS) is a system of collecting, storing and processing financial and accounting data that are used by decision makers, management or externally by other interested parties including investors, creditors, and tax authorities (Olatunji, 2013). Similarly, Harash (2017) posits that CAS is one of the core success factors that effectively support the achievement of accounting and financial objectives, improve strategic effort of MSEs and improve data sharing and integrity. He further states that computer technologies increase the use of information due to its capabilities of analyzing massive amounts of data and in producing accurate and timely reports. Also, it can be argued that except for statutory demands, micro and small scale enterprises hardly give serious thoughts to the process of sound accounting, while also noting that the inadequacy and ineffectiveness of CAS have been responsible for untimely collapse of a host of them. Furthermore, Kpurugbara, et al, (2016) states that effective and efficient management of every organization is anchored on quality decisions. They maintained that in order to prevent financial disasters through wrong and ineffective decisions, there is nowadays a vast pool of financial tools available which can be used to support the decision making process in organizations and when not explored, can lead to management inefficiency. They state that one tool that has proven to be readily available in the promotion of quality

decisions in the organization is the accounting information system (AIS). Satyawati, et al, (2017) maintained that in Indonesia, micro, small and medium scale enterprises are still in the manual recording process of financial transactions and financial reporting. They found that small business enterprises lack knowledge in computerized accounting systems and whether it is useful to support their business continuity. It was also found that the adoption of computerized accounting systems, no doubt, enhanced speed and improved the quality of financial and non-financial reports prepared by MSEs in Nigeria.

By and large, the adoption of computerized accounting systems may be one of the tools that can lead to the growth of MSEs given the nature and complexity of financial transactions of the organization and the business environment and as well lead to its failure by refusal to adopt computerized accounting systems. In light of the aforementioned factors influencing the growth and failure of MSEs, the following null hypothesis is created to examine the effect of adopting computerized accounting systems on the growth of MSEs.

(i). Adoption of computerized accounting systems does not contribute to the growth of micro and small enterprises.

2.2. Empirical Review

There are many studies carried out on the effect of adopting computerized accounting systems on the growth of micro and small enterprises worldwide. In a research work by Nkwor-Azariah and Nkwor (2015) on the impact of accounting and information systems on the performance of small scale enterprises in Rivers State, Nigeria, two hypotheses were formulated. Findings show that there is a significant relationship between the adoption of computerized accounting systems and the performance of SSEs in Rivers State and the country at large. Fagbemi and Olaoye (2016) carried out a study to examine if the accounting information system influences the performance of small and medium scale enterprises (SMEs) and whether it also aids access to finance. Findings from the study reveal that accounting information systems significantly influence the performance of small and medium scale enterprises. Furthermore, the research work carried out by Kpurugbara, et al, (2016) published in International Journal of Research examines the impact of accounting information systems on performance of selected small scale enterprises in Woji, Port-Harcourt, River State, Nigeria. Finding reveals that by supporting rational operational decisions, accounting information systems enhance management efficiency and cost control. Tijani and Mohammed (2013) studied computer-based accounting systems in small and medium enterprises in the city of Lagos State, Nigeria. Finding shows that the use of computer based accounting systems by Nigerian SMEs is highly significant as all companies operating in all industries surveyed use one type of accounting software or another. Esmeray (2016) studied the impact of accounting information systems on firm performance: Evidence in Turkish small and

medium sized enterprises. A positive relation is found between the use of AIS and growth. In addition, Sam, et al, (2012) in their study "the adoption of Computerized Accounting Systems (CAS) in small and medium enterprises in Melaka, Malaysia" reveals that CAS adoption rate in Melaka is high; and also that the types of business as well as business locations influence the adoption of CAS.

3. Methodology

3.1 Research Design

The researcher employed primary sources of data focusing on the owner/managers and employee/managers of the MSEs. The primary sources of data used were questionnaires. Data was tested using linear regression techniques and Analysis of Variance (ANOVA)

3.2 Model Specification

The hypothesis was tested using linear regression techniques and Analysis of Variance (ANOVA). As a result, the following model equations are used to develop their respective variables.

ACAS = Adoption of computerized accounting systems

GMSEs = Growth of MSEs

a = Regression equation intercept

b = Regression equation coefficient

μ = error term

Thus, for this hypothesis which states that adoption of computerized accounting systems have no effect on the growth of MSEs. It is represented by the equation

$GMSEs = a+b\ ACAS + \mu \quad . \quad . \quad . \quad . \quad . \quad . \quad (i)$

Decision Rules

Reject the null hypothesis if the R-computed value is greater than the probability value, otherwise accept.

4. Data Presentation and Analysis

Table 4.1.1: Distribution and Collection of Questionnaire from the respondents

States	Number Distributed	Number correctly returned	Number not returned	Percentage of number returned (%)	Percentage of number not returned	Total (%)

Abia	67	54	13	14.1	3.4	17.5
Anambra	98	82	16	21.4	4.2	25.6
Ebonyi	51	42	9	10.9	2.3	13.2
Enugu	76	65	11	16.9	2.9	19.8
Imo	92	73	19	19.0	4.9	23.9
Total	384	316	68	82.3	17.7	100

Source: Researcher's Compilation, 2024

The table 4.1.1 above showed that out of three hundred and eighty four (384) copies of questionnaire distributed to five states under study, only three hundred and sixteen (316) copies representing 82.3% were correctly answered and returned. Sixty eight (68) copies of questionnaire representing 17.7% were not returned.

Table 4.1.2.: Position in the business

Position	**Frequency (f)**	**Percentages %**
Owner manager	205	64.9
Employee manger	111	35.1
Total	316	100

Source: Researcher's Compilation, 2021

Table 4.1.2 showed that owner manager or who manage their own business enterprises is 205 representing 64.9% while employee managers is 111 representing 35.1% of the Respondents.

Table 4.1.3: Did you adopt computerized accounting systems in your business

Responses	No of Respondents	Percentages %
Yes	203	64.2
No	113	35.8
Total	316	100

Source: Researcher's Compilation, 2024

Table 4.1.3 above showed that 203 Respondents representing 64.2% affirmed that they adopted computerized accounting systems for their business operations while 113(35.8%) said they did not. We shall try to find out from the Respondents the reasons why they adopted computerized accounting systems in their business operations as well as the reasons why those who did not adopt it in the tables below.

Table 4.1.4: For those that say yes on table 4.1.3: What is the main reason for adopting computerized accounting systems in your business?

Reasons for adopting computerized accounting systems	No of Respondents	Percentages %
a. Keeping accurate records and timely information	54	26.6
b. Ability to pay appropriate amount in tax	18	8.9
c. Profit determination	16	7.9
d. Planning and control purposes	22	10.8
e. Business management and decision making	40	19.7
f. Ability to monitor growth or failure	48	23.6
g. Others	5	2.5
Total	203	100

Source: Researcher's Compilation, 2024

The reasons respondents given on table 4.1.4 are tenable. It is observed from the findings that fifty four (54) of the respondents representing 26.6% claimed that it was for keeping accurate records and timely information, while 48 of the respondents representing 23.6% said it was to monitor growth or failure, and so on.

Table 4.1.5: For those that say no in table 4.1.3: What is your reason for not adopting computerized accounting systems?

Items	No of Respondents	Percentages %
a. It is time consuming	13	11.5
b. It requires more staff	11	9.7
c. I keep them in memory	10	8.8
d. I own the business, hence not accountable to any person	16	14.2
e. It is difficult to maintain the system	6	5.3
f. Lack of accounting skills and knowledge	24	21.2
g. Lack of computer knowledge and skills	13	11.5
h. Costs of maintenance and other problems like lack of power	9	8.0
i. It is expensive	8	7.1
j. Others	3	2.7
Total	113	100

Source: Researcher's Compilation, 2024

Results from the above table 4.1.5 showed that the majority of the Respondents 24(21.2%) attributed the cause to lack of computer knowledge and skills. Also, 16(14.2%) respondents out of the 113 of them claimed that it was due to the fact that they own the business themselves and as a result not accountable to any other person.

Table 4.1.6: Adoption of Computerized Accounting Systems (CAS)

s/n	Item Statements	SA	A	UN	D	SD	Total	Mean	ST.D
1.	Computerized accounting systems (CAS) have positive effects on the growth of MSEs	83	80	24	60	69	316	3.15	1.53
2.	It is very easy for MSEs to adopt CAS in their businesses	83	71	20	69	73	316	3.07	1.56

3.	Costs of having computerized accounting systems exceeds its benefits	69	73	21	75	78	316	2.94	1.44
4.	Manual system is easier and less cumbersome than computerized accounting systems	105	81	19	51	60	316	3.38	1.54
5.	Lack of IT knowledge on computerized accounting systems poses a big problem to MSEs	88	74	24	63	67	316	3.17	1.54
6.	IT sophistication and CAS adoption are very complex to MSEs	77	83	23	70	63	316	3.13	1.50
7.	Using computers to generate accounting information assist in identifying all expenses incurred by firm	94	82	18	59	63	316	3.27	1.54
8.	The use of computers in generating accounting information saves operating time	90	87	23	61	55	316	3.30	1.49
9.	Continuous workshop will encourage CAS adoption in MSEs	79	84	20	74	59	316	3.16	1.49
10.	The level of satisfaction with entrepreneurs regarding computerized accounting systems adoption is relatively low	77	75	24	68	72	316	3.05	1.53
	Grand mean							3.16	0.04

Source: Researcher's Compilation, 2024

Table 4.1.6 above showed the mean responses on the effect of adoption of computerized accounting systems on the growth of MSEs. Results showed that computerized accounting systems have positive effects on the growth of MSEs (means: 3.15), lack of information technology (IT) knowledge on computerized accounting systems poses a big problem (mean: 3.17); while continuous workshop will encourage CAS adoption in MSEs (mean: 3.16). A grand mean of 3.16 indicates that the majority of the respondents agreed to the assertions while a

standard deviation of 0.04 means that the respondents' views on the above statements do not vary so widely from one another.

4.2 Test of Hypotheses

Ho: Adoption of computerized accounting systems can not contribute to the growth of MSEs

Table 4.2.1: Model Summary [b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.882[a]	.778	.777	.59151	.461

Source: Data Analysis, 2024

a. Predictors: (Constant), Adoption of computerized accounting system

b. Dependent Variable: Growth of MSEs

Table 4.2.2: ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	384.373	1	384.373	1098.561	.000[b]
	Residual	109.865	314	.350		
	Total	494.237	315			

Source: Data Analysis, 2024

a. Dependent Variable: Growth of MSEs

a. Predictors: (Constant), Adoption of computerized accounting system

Table 4.2.3: Coefficients [a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.209	.070		2.993	.003

Adoption of computerized accounting system	.926	.028	.882	33.145	.000

Source: Data Analysis, 2024

a. Dependent Variable: Growth of MSEs

R = 0.882

R^2 = 0. 778

F = 1098.561

T = 33.145

DW = 0. 461

Interpretation:

The regression sum of squares (384.373) is greater than the residual sum of squares (109.865), which indicates that more of the variation in the dependent variable is not explained by the model. The significance value of the F statistics (0.000) is less than 0.05, which means that the variation explained by the model is not due to chance.

R, the correlation coefficient which has a value of 0.882, indicates that there is a positive relationship between adoption of computerized accounting systems and the Growth of MSEs. R square, the coefficient of determination, shows that 77.5% of the variation in Growth of MSEs is explained by the model.

With the linear regression model, the error of estimate is low, with a value of about .59151. The Durbin Watson statistics of 0.309, which is not more than 2, indicates there is no autocorrelation. The adoption of computerized accounting systems coefficient of 0.844 indicates a positive significance between adoption of computerized accounting systems and Growth of MSEs, which is statistically significant (with t =33.145). Therefore, the null hypothesis should be rejected and the alternative hypothesis accordingly accepted. Thus adoption of computerized accounting systems significantly contribute to the growth of MSEs

5. Findings and Discussion of Results

Results from the above sub-head revealed that adoption of computerized accounting systems can contribute to (r = 0.882, t = 33.145, f = 1098.561 > prob. val. = 0.05) the growth of MSEs. Other results showed that computerized accounting systems have positive effects on the growth of MSE (mean 3.15). It is very easy to adopt CAS in MSEs (mean 3.07). Cost of having CAS does not exceed its benefit in the organization (mean 2.94). In MSEs, the manual system is easier and less

cumbersome than CAS (mean 3.38). Lack of IT knowledge on computerized accounting systems poses a big problem (mean 3.17). Information Technology (IT) sophistication and CAS adoption is very complex to MSEs (mean 3.13). Using computers to generate accounting information assists in identifying all expenses incurred by a firm (mean 3.27). Other findings showed that the use of computers in generating accounting information saves operating time (mean 3.30). We equally found out that continuous workshops will encourage CAS adoption in MSEs (mean 3.16). And finally, the level of satisfaction with entrepreneurs regarding CAS adoption is relatively low (mean 3.05). These results are in agreement with the results of research studies conducted by Esmeray (2016); Fagbemi & Olaoye (2016); Kpurugbara, Akpos, Nwiduuduu, & Tams-Wariboko (2016); Nkwor-Azariah & Nkwo (2015); Sam, Hoshino, & Tahir (2012); and Tijani & Mohammed (2013).

6. Conclusion and Recommendation

Micro and small enterprises play major roles in the industrial and economic development of the economy. In Nigeria, Micro businesses have a total employment of about 57.84 million while that of small scale enterprises have 1.86 million people (Nigeria National Policy on MSMEs, 2014). Thus, having a large number of people in the sector, it is pertinent to ensure that those in the business experience growth rather than failure. The most likely factor to stimulate such growth is the adoption of computerized accounting systems in their business operations. Inefficiencies in adopting computerized accounting systems result in poor financial performance and eventually lead to failure. As for the adoption of computerizing accounting systems, it is not very easy for all MSEs to adopt a computerized accounting system due to its complexity and costs. Thus, considering all different elements about accounting information systems, it has been noted that it is of great importance to MSEs especially in its financial recording and accounting purposes. It assists in the decision making process, recording and storing source documents, et cetera. This paper recommends the MSEs to adopt, where it is possible, computerized accounting systems for efficiency in their business operations.

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