

Effect of Accounting Practices on Trade and Information Technology in Calabar Metropolis

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ABSTRACT: *This study examined effect of accounting practices on trade and information technology in Calabar metropolis. The study specifically assessed the effect of accrual accounting and cash accounting practices on usage of information technology for trade by SMEs in Calabar metropolis. The study applied the survey research design with a well-structured questionnaire administered on three hundred and seven respondents. The ordinary least square technique was the analytical tool used in the study's analysis. Findings from the analysis showed that accrual accounting and cash accounting practices had no significant effect on trade through information technology. Based on the findings, it was concluded that though accounting practices have no direct significant effect on information technology but in reality, information technology plays vital roles in modern trade towards effective and efficient attainment of organisational goals and objectives of setting up of SMEs. Relying on the findings and the conclusion reached, the study recommended that owners and managers of SMEs should train their employees on the use of accounting software, which are developed by information technology experts, for the timely preparation of accounting reports and or financial statements for prompt decision making. Lastly SMEs should investment adequate resources in accounting information system as this is necessary to monitor the level of organization activities, track receivables and conduct inventory control.*

Keywords: *Accounting practices, Trade, Information technology, Accrual accounting, Information, Cash accounting*

I. INTRODUCTION

In recent times, accounting practices have been developed to enhance trade strategies through application of information technology software. With the aid of information technology software, enterprises adopt accrual and cash accounting practices in reporting their annual expenses and accruing revenues for the period promptly for business decision making. Generally, almost all SMEs in Calabar Metropolis, where this

Study was conducted seemed to have adopted both accrual and Cash accounting practices in preparing their accounting documents. It is worthy to note that every single business transaction can be done on either cash or accrual basis; where cash payments or receipts are done now or in the nearest future respectively.

Sole proprietor and individual finances are managed basically on cash accounting basis or practices; SMEs can conveniently run their businesses only on cash transactions without any inhibiting problem to the growth of the businesses. Credit transactions which consequently can lead to accrual accounting practice could invariably result in business expansion.

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However, appropriate credit or corporate strategies should be formulated and implemented to control default in payments or resultant bad debts. Development in the area of information technology programs can ensure that these aspects of accounting practices and corporate strategies are executed effectively and efficiently. Again, accounting practices and/ or financial management practices enrich the growth and development of SMEs (Asuquo, Effiong & Tiesieh, 2012).

In this day and age, the use of information technology in the practices and functions of accounting had become imperative. This has invariably influenced the management of business as this is synonymous to the way and manner practices and functions of accounting are carried out towards achievement of business objectives. Accounting professionals have also developed the necessary skills and technical know-how in information technology programs and software packages in order to perform their tasks effectively and efficiently. It is a known fact that information technology procedures and devices have had a great and positive impact on the reporting practices of professional accountants involved in the financial management practice of SMEs in Nigeria. From the foregoing, Information technology applications are essential for real and proficient management of all forms of businesses ranging from SMEs to multinational corporations to meet the global standards. Hence, there are overwhelming benefits accruing to the businesses through the application of IT packages; these include value-added staff, timely delivery of service, cost saving and control, capacity enhancement, increase in productivity rate, etc. (Moghaddam, Baygi, Rahmani, & Vahedian, 2012; Asuquo, 2012; Asuquo, 2013).

The value and magnitude of accounting information ensure timely managerial decision making and this is facilitated by the provisions made reachable by IT experts. Some modern software is developed by IT experts specifically for managerial decision taking. The success of business schemes is crucial when considering the option of purchasing the necessary IT software to facilitate the handling of financial dealings in SMEs. The high-priced cost of software improvement, comparatively low cost of profit-making applications, growing demand from SMEs that are too small to have the funds for internal systems development employees, the inclination towards logistic units reorganization into disseminated data handling environs, and ease of access of software solutions in global IT resource shops have made the choice of acquisition an ideal option. The dare is not the preliminary costs of IT system fixing, nonstop cost of merchant sustenance, raw facts transformation, but other allied costs are more challenging (Collins, 1999; Asuquo, 2012; Jones, 2002; Finkelstein & Farbey, 2004).

1.2 Statement of the Problem

Accounting methods and need for technological adoption are necessitated by the dynamic and complex nature of modern business management. The competition and the complexity of modern businesses explain why many businesses choose an appropriate accounting method and the accounting information technique that will support efficient, effective and professional decision making and management. Hence, the expectation remains that after the adoption of an accounting method and accounting information system, the business should maintain adequate record capable of reducing fraud and promoting profitability. However, several businesses in Cross River State and Calabar Metropolis are unable to acquire these accounting information technology systems due to high cost. The ones who can afford these systems are unable to have adequate training for personnel to man the systems. The effect of this is poor recording system which leads to the inability of businesses to prevent fraud, promote growth and make IT informed decisions or professional management decisions. This study therefore sought to assess effect of accounting practices on trade management through information technology in Calabar metropolis, Cross River state, Nigeria.

II. RESEARCH OBJECTIVES

This study sought to achieve a set of objectives, which are as follows: Assess the effect of cash basis accounting method on the adoption of IT in the trade management by SMEs in Calabar metropolis; and examine the effect of accrual basis accounting method on the adoption of IT in the trade management by SMEs in Calabar metropolis.

III. CONCEPTUAL FRAMEWORK

The conceptual framework on effect of accounting practices on business management and information technology in Calabar metropolis is explained where accounting practices, measured by accrual accounting and cash practices were the independent variables and trade by the use of information system/technology was the dependent variable. Increases in the uses of accrual accounting practice and cash accounting practice were deemed to have no significant enhancement on trade by the use of information systems/technology by SMEs in Calabar metropolis, Cross River State, Nigeria. Conceptually, all over the world, information technology plays vital roles in the smooth handling of affairs of trade by SMEs. Therefore, research into this crucial area of any economy is a worthwhile venture

IV. METHODOLOGY

A. Research Design

In this study, the survey research design was used. This is because the study measured the dependent and independent variables at the same point in time using a single questionnaire. The cross-sectional survey design helped the researchers to collect data on both the dependent and independent variables. The population of this study comprised of all the registered SMEs in Calabar metropolis. Information from the ministry of trade and investment

showed that there are a total of one thousand three hundred and twenty six registered SMEs in Calabar Metropolis.

B. Sampling Procedure and Sample Size determination

For the purpose of this study, the stratified random sampling design was combined with the accidental sampling techniques to determine the sample size and administer the research instrument on the sampled respondents. To this end, the researchers divided the population into two strata comprising the SMEs in Calabar South and SMEs in Calabar Municipality. The researchers then select two hundred SMEs from Calabar Municipality and one hundred and seven SMEs from Calabar South. This amounted to the three hundred and seven respondents that were used for this study. The researchers then proceeded to administer the research instrument to the sampled population based on their willingness to attend to the research instrument. The sample size of three hundred and seven was determined using the Taro Yamane formula thus:

$$n = \frac{N}{1 + "Ne^2}$$

Where N = Population size

N = Sample size

e = Tolerable error

l is constant

$$\begin{aligned} n &= \frac{1326}{1 + 1326e^2} \\ n &= \frac{1326}{1 + 1326(0.05)^2} \\ &= \frac{1326}{1 + 1326(0.0025)} \\ &= \frac{1326}{1 + 3.315} \\ &= \frac{3126}{4.315} \end{aligned}$$

$$n = 307.3'' \text{ (approximately 307)}$$

C. Research Instrument

The instrument developed by the researchers for the study is a 15-item questionnaire designed to collect data on the subject of this study. The questionnaire was administered on the SMES owners in Calabar metropolis. The instrument was divided into three subscales each of which had five item questions.

D. Data Analysis Technique

The data gathered for this study were summarized and tabulated using tables and percentages. The data were analysed using the ordinary least square regression technique.. Also, since the study sought to assess the effect of accounting practice on business management and information technology in Calabar metropolis regression analysis was appropriate analytical technique because it tested cause - effect relationship(s) between dependent and independent variables of the study.

E. Model Specification

A model represents a simplified representation of real-life phenomenon. The ordinary least square regression model was used to test the effect of accrual accounting and cash accounting on information technology system.

The functional relationship was expressed thus:

$$ITS = f(ACM, CAM) \dots\dots\dots (1)$$

The ordinary least square multiple regression models were given as:

$$ITS = \beta_0 + \beta_1 ACM + \beta_2 CAM + e_t \dots\dots\dots (2)$$

Where

β_0 = Regression constant

β_1 , and β_2 , = Regression Parameters

IIS = Information technology system

ACM = Accrual accounting method

CAM = Cash accounting method

e_t = Stochastic error term

This section presents data obtained from research instruments and their analysis. The most important feature of this is to test the research hypotheses formulated. In this study two hypotheses were formulated. Three hundred and seven questionnaires were administered on the study's sample, out of which two hundred and ninety-eight were duly completed and returned. Respondents' responses were analysed using appropriate statistical tool in order to generate descriptive statistics such as tables of frequencies and simple percentages which were the estimates for this study.

V. RESULTS

TABLE 4.1: Distribution of respondent's response Information technology System

Items	SA (percent)	A (percent)	UN (percent)	D (percent)	SD (percent)
My business uses accounting software for assets management and inventory control	122(40.9)	95(31.9)	51 (17.1)	18 (6.0)	12(4.0)
Receivables and payables management are done using accounting software	59(19.8)	63(21.8)	3(1.0)	82(27.5)	89(29.9)
Our organization is yet to adopt information technology system, hence the use of manual records	103(34.6)	93(31.2)	45(15.1)	6 (2.0)	51(17.1)
Our business has invested sufficient funds in training staff on the use of information technology system	63(21.1)	55(18.4)	6 (2.0)	93 (31.1)	81(27.2)

TABLE 4.2: Distribution of "respondent's response on Accrual Accounting System

Items	SA (percent)	A (percent)	UN (percent)	D (percent)	SD (percent)
Income is recognized by our business when earned not necessarily when cash is received	59 (19.8)	56(18.7)	30 (10.1)	80 (26.8)	73(24.5)
Expenses are recognized when incurred, not necessarily when cash is paid	84(28.2)	97(32.6)	55(18.5)	50(16.8)	12(4.0)
Income is matched against the expense that generated it in our firm	2 (0.7)	54(18.1)	64(21.5)	101(33.9)	77(25.8)
Many organization only records all items in a book, hence all items are recorded in just a particular book	94 (31.5)	63(21.1)	55(18.4)	93 (31.1)	81(27.2)



TABLE 4.3: Distribution of respondent’s response on Cash Accounting bases

Items	SA (percent)	A (percent)	UN (percent)	D (percent)	SD (percent)
Income is recognized by our business when cash is received, not necessarily when earned	122(40.9)	95(31.9)	51 (17.1)	18 (6.0)	12 (4.0)
Expenses are recognized when cash is paid, not necessarily when incurred	89(29.9)	82(27.5)	59(19.8)	63(21.8)	3(1.0)
Income is matched against the expense that generated it in our firm	6 (2.0)	51(17.1)	45(15.1)	103(34.6)	93(31.2)
We recognize some income items when earned and some expenditure item when incurred while at the same time other income and expenditure items are recognized when cash is received and paid	(2.0)	63(21.1)	55(18.4)	93 (31.1)	81(27.2)

Source: Fieldwork, 2020

Table 4.1 is the distribution of respondents’ responses on information technology system. The results presented in Table 4.2 revealed that 122 of the respondents which represent (40.9 percent) strongly agreed that their business uses accounting software for assets management and inventory control, 95 (31.9 per cent) agreed, 51 (17.1 per cent) were undecided, 18 (6.0 per cent) disagreed while 12 of the respondents representing (4.0 per cent) strongly disagreed on the issue. Also, 59 of the respondents which represent (19.8 per cent) strongly agreed that receivables and payables management are done using accounting software, 63 (21.8 per cent) agreed, 3 (1.0 per cent) were undecided 82 (27.5 per cent) disagreed while 89 of the respondents representing (29.9 per cent) strongly disagreed on the issue.

Furthermore, 103 of the respondents which represent (34.6 per cent) strongly agreed that their organization is yet to adopt information technology system, hence the use of manual records, 93 (31.2 per cent) agreed that their organization is yet to adopt information technology system, hence the use of manual records, 45 respondents, representing 15.1 per cent of the entire sampled SMEs were undecided, 6 respondents, representing 2.0 per cent of the sampled respondents disagreed while 51 respondents representing 17.1 per cent of the sampled SMEs strongly disagree on the matter. Additionally, 63 (21.1 per cent) of the respondents strongly agreed that their business has invested sufficient funds in training staff on the use of information technology system, 55 (18.4 per cent) only agreed that their business has invested sufficient funds in training staff on the use of information technology system, 6 (2.0 per cent) were undecided, 93 (31.1 percent) disagreed while 81 (27.2 per cent) strongly disagreed that their business has invested sufficient funds in training staff on the use of information technology system

Table 4.2 is the distribution of respondents’ responses on Accrual Accounting System. The results presented in table 4.3 indicated that 59 of the respondents which represent

(19.8 percent) strongly agreed that income is recognized by our business when earned not necessarily when cash is received, 30 (10.1 per cent) were undecided, 80 (26.8 per cent) disagreed while 73 (24.5 per cent) strongly disagreed on the issue. Also, 84 of the respondents which represent (28.2 per cent) strongly agreed Expenses were recognized when incurred, not necessarily when cash is paid, 97 (32.6 per cent) agreed, 55 (18.5 per cent) were undecided, 50 (16.8 per cent) disagreed while 12 (4.0 per cent) strongly disagreed on the issue.

Equally, 2 of the respondents representing (0.7 percent) strongly agreed that income is matched against the expense that generated it in our firm, 54 (18.1 per cent) agreed, 64 (21.5 per cent) were undecided, 101 (33.9 per cent) disagreed while 77 (25.8 per cent) strongly disagreed on the issue. Lastly, 94 of the respondents which represent (31.5 per cent) strongly agreed that their organization only records all items in a book, hence all items are recorded in just a particular book, 63 (21.1 per cent) agreed on the issue, 55 (18.4 per cent) were undecided, 93 (31.1 per cent) disagreed while 81 (27.2 per cent) strongly disagreed on the issue.

Table 4.3 is the distribution of respondents’ responses on cash accounting bases. The results presented in table 4.4 revealed that 122 respondents representing 40.9 percent strongly agreed that Income is recognized by our business when cash is received, not necessarily when earned, 95 (31.9 per cent) agreed, 51 (17.1 per cent) were undecided, 18 respondents (6.0 per cent) disagreed while 12 (4.0 per cent) of the respondents strongly disagreed on the issue. Also 89 of the respondents which represent (29.9 percent) strongly agreed that expenses are recognized when cash is paid, not necessarily when incurred, 82 (27.5 per cent) agreed, 59 (19.8 per cent) were undecided, 63 (21.8 percent) disagreed while 3 (1.0 per cent) strongly disagreed on the issue .

Equally, 6 of the respondents representing (2.0 per cent) strongly agreed that income is matched against the expense that generated it in our firm, 51 (17.1 per cent) agreed, 45 (15.1 per cent) were undecided, 103 (34.6 per cent) disagreed while 93 (31.2 per cent) strongly disagreed on the issue. Additionally, 6 of the respondents (2.0 per cent) strongly agreed that We recognize some income items when earned and some expenditure item when incurred while at the same time other income and expenditure items were recognized when cash is received and paid, 63 (21.1 per cent) agreed, 55 (18.4 per cent) were undecided 93 (31.1 per cent) disagreed while 81 (27.2 per cent) strongly disagreed with the statement.

F. Data analysis and interpretation

The above responses were analysed with the ordinary least squared regression technique as shown below:

TABLE 4.4: Regression result
Dependent variable: ITS

Variable	Coefficient	Std Error	t-stat	Prob.
C	5.846	1.704	3.430	0.001
ACM	0.065	0.047	1.382	0.168
CAM	0.095	0.054	1.759	0.080
	R ²	-	0.971452	
	R ² (adj)	-	0.967884	
	F-stat	-	272.2335	

Source: Researchers' Computation, 2020

AIS = Information technology system

ACM = Accrual accounting method

CAM = Cash accounting method

The result in table 4.4 above revealed that there exist positive effects of accrual accounting method and cash accounting method on trade management through improved information technology system. This is in tandem with the a priori criteria. The parameter estimates have positive signs implying that one per cent increase in accrual accounting method and cash accounting method led to about 6.5 per cent and 9.5 per cent, increases in the adoption of accounting information system or information technology system. The goodness of fit of the model as indicated by their R² value of 0.9715 or 97.15 per cent and R²adjusted value of 0.9679 or 96.79 percent indicated that the model has a good fit, the R²adjusted value of 0.9679 or 96.79 per cent indicated that the total variation in the observed behaviour of information technology system was jointly explained by the variations in accrual accounting method and cash accounting method up 96.79 per cent, the remaining 3.21 per cent is accounted for by the disturbance term. The overall significance of the model was also tested using the ANOVA or f-statistics. Here the high significance of the f-statistics value of 272.2335 confirmed that the high predictability of the model did not occur by chance, it actually confirmed that the model has a good fit.

G. Discussion of findings

Findings arising from the effect of accrual accounting practice on the adoption of information technology system showed that accrual accounting practice had a positive but

insignificantly effect on the adoption of information technology system. This implied that the continuous use of accrual accounting perspective increases less proportionally the adoption of information technology system. This finding is supported by Moghaddam et al., (2012) who study the impact of accounting perspective and management on information technology system adoption. The study applied the correlation technique, and found a strong relationship between accrual accounting and information technology system adoption Findings from cash accounting and information technology system adoption relationship had a positive but significant relationship. The use of cash accounting methods enhanced the adoption of information technology system. This was so since organizations were willing to present their record and access them on timely bases. This finding is supported by Banker, Chang and Kao, (2002) who studied the effect of accounting perspective on information management. Their study showed the existent of a significant positive effect of cash accounting method on information technology system.

VI. CONCLUSION AND FUTURE SCOPE /RECOMMENDATIONS

H. Conclusion

This study examined the effect of accounting practice on trade and information technology. Accounting practices were measured in terms of cash accounting and accrual accounting practices. To achieve the objectives Of the study, the researchers administered well-developed and validated questionnaires on three hundred and seven sampled respondents in the selected SMEs in Calabar metropolis. The responses from the questionnaires were coded and analysed with the ordinary least square regression technique in order to estimate the relevant coefficients of the research variables. From the analysis done, the following major findings were made: Accrual accounting practice does not have any significant effect on the information technology system. Cash accounting practice does not have any significant effect on information technology system in Calabar metropolis. It was therefore concluded that there exist positive effects of both accrual accounting and cash accounting practices on trade management as well as information technology system in Calabar metropolis. This implies that information technology can be enhanced for improved accounting practices which in turns ensure effective and efficient trade management.

I. Future scope/recommendations

As future scope, it is suggested that more researches should be undertaken in the identified areas such as: investments in information technology and their effects on the going concern of SMEs in Calabar, Nigeria; SMEs growth and survival in the face of global technological development, etc. Moreover, based on the findings and the conclusion reached in the study, the following policy recommendations were made: To increase adoption of information technology system, SME should train their employees on the use of accounting software in recording and producing accounting reports.



SMEs should undertake investment adequately in resource of information technology system as this is necessary to enrich the level of organization activities, track receivables and conduct inventory control for improved performance.

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REFERENCES

1. Asuquo, A. I. (2012). Empirical analysis of the impact of information technology on forensic accounting practice in Cross River State-Nigeria. *International Journal of Scientific and Technology Research* ISSN: 2277-8616; volume 1 (issue 7): pp. 25-33.
2. Asuquo, A. I., Effiong, S. & Tiesieh, A. (2012). The effect of financial management practice on profitability of small and medium enterprises in Nigeria. *International Journal of Research in IT, Management and Engineering*, ISSN: 2249-1619, volume 2(issue 3):pp. 22-38.
3. Asuquo, A. I. (2013). Analysis of financial accounting standards and their effects on financial reporting and practices of modern business organizations in Nigeria. *European Journal of Business and Management*; ISSN: 2222-1905 (paper) ISSN: 2222-2839 (online) volume 5 (issue 4), pp. 60-68.
4. Banker, R., Chang, H., & Kao, Y. (2002). Impact of information technology on public accounting firm productivity. *Journal of Information Systems*, volume 16 (issue 2). pp. 209-222.
5. Collins, J. (1999). How to select the right accounting software? *Journal of Accountancy*, New-York, volume 188 (issue 2), pp. 61-69.
6. Finkelstein, A., & Farbey, B. (2004). Software acquisition: A business strategy analysis. *Journal of information technology*, volume 6 (issue 8), pp. 54-62.
7. Jones, R. (2002). Spotlight on mid-level ERP software. *Journal of Accountancy*, New-York, volume 193 (issue 5), pp. 24-47.
8. Moghaddam, A., Baygi, S., Rahmani, R., & Vahediyan, M. (2012). The impact of information technology on accounting scope in Iran. *Middle-East Journal of Scientific Research* volume12 (issue 10): pp. 13-48.

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