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THE ROLE OF ACCOUNTING INFORMATION SYSTEMS ON ORGANIZATIONAL PERFORMANCE (A STUDY OF NIGERIAN BOTTLING COMPANY, 9TH MILE CORNER, ENUGU).

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Abstract
The research work focuses on the role of accounting information systems on organizational performance (A study of Nigerian Bottling Company, 9th Mile corner, Enugu). The objective was to: determine the extent to which accounting information enhances profitability of Nigeria Bottling Company. The researchers used survey research design. The population of the study is 140, while the sample size is 104 which was determined using the Taro Yamane Formula. It was found that the accounting information system had positive significant effect on the profitability of Nigeria Bottling Company, with (x^2cal= 40.72>(x^2 tab) = 7.81). it was concluded that it is imperative that accounting information system is inevitable in the overall performance of the organization. With proper accounting information systems it can help the organization plan and making far reaching decisions that will help organization achieve competitive advantage. It was recommended that accounting information system should be adopted by the Nigeria Bottling Company as it will help them to have superior performance and build trust in the minds of their investors.

Keywords: Role, Accounting Information Systems, Organizational Performance, Study, Nigerian Bottling Company.

Introduction

Balogun, (2008) opines that in the primitive days, man started his transactions with his fellow men with the method of "Trade By Barter" thus, the need for record keeping or auditing did not arise. However, the advent of money and the consequent increase in the number of transactions make the keeping of records and accounts and their audits unavoidable. Thus in these days bookkeepers read the accounts to the Auditors who heard them and testified to their correctness or otherwise. Conventionally, accounting is purely based on manual approach. The experience and competence of an individual accountant is critical in accounting

processes. Accounting Information Systems can support an automation of processing large amount of data and produce timely and accuracy of information.

Early accounting information systems were designed for payroll functions in 1970s. Originally, accounting information systems were developed "in-house" as no packaged solutions were available. Such solutions were expensive to develop and difficult to maintain. Therefore, many accounting practitioners preferred the manual approach rather than computer-based. Today, accounting information systems are more commonly sold as prebuilt software packages from large vendors such as Microsoft, Sage Group, SAP AG|SAP and Oracle Corporation Oracle where it is configured and customized to match the organization's business processes. Small businesses often use accounting lower costs software packages such as Tally. ERP 9, MYOB and Quickbooks. Large organisations would often choose ERP systems. As the need for connectivity and consolidation between other business systems increased, accounting information systems were merged with larger, more centralized systems known as enterprise resource planning (ERP). However, with separate applications to manage different business functions, organizations had to develop complex interfaces for the systems to communicate with each other. In Enterprise Resource Planning, a system such as accounting information system is built as a module integrated into a suite of applications that can include manufacturing, supply chain, human resource. These modules are integrated and are able to access the same data and execute complex business processes. Today, Cloud-based accounting information systems are increasingly popular for both Small and Medium Enterprises and large organizations for lower costs. With adoption of accounting information systems, many businesses have removed low skills, transactional and operational accounting roles. *(Accounting Information Systems: Information on Collection, Storage and Processing of Financial and Accounting Data. Accounting Information Systems. Retrieved 7 December 2012. Retrieved again on 12, April, 2020).*

Accounting Information Systems have been widely adopted by organizations within both the public- and private sector (Rom & Rohde, 2007). In 1970, the Accounting Principles Board of the American Institute of certified Public Accountants emphasized that the function of accounting is to provide quantitative information, primarily financial in nature, about economic entities, that is intended to be useful in making economic decisions. Accounting is often called the Language of Business. It is the common language used to communicate financial information to individuals, organizations, and government agencies about various aspects of business such as financial position, operating results and cash flows. The users of accounting both inside and outside the business have to make decisions concerning the allocation of limited economic resources. In order to ensure that resources are allocated in an efficient and effective manner, users require financial information for the purpose of making decisions.

Accounting provides information that is useful in making business and economic decisions. It is the primary means of communicating financial information to owners, lenders, managers, government and its regulatory agencies and others who have interest in an enterprise. It helps the users in taking better decisions by providing relevant, reliable and timely information on the financial and operational position of an enterprise. With the development of the use of

accounting information systems and expand the application of quantitative methods in addressing the problems of organizations has become decisions makers more dependent on accounting as a result of favorable data generated by the Information Technology for the purposes of decision-making and planning activities and which is characterized to be associated with the future. To provide these needs specialists headed toward the application of methods and concepts appropriate in all branches of knowledge in the treatment of the input data. Not only that, but that most accounting systems become based on the use of computers in electronic data processing.

Statement of Problem

Accounting information system is indispensable in the effective and efficient management of every organization. An accounting information system is generally a computer-based method for tracking accounting activity in conjunction with information technology resources. Without accounting information system it becomes difficult for organizations to make informed decisions. Since an accounting information system is a system of collecting, storing and processing financial and accounting data that is used by decision makers it becomes imperative that the installation of A.I.S should be adopted by organizations to be able to remain relevant in the competitive business environment.

Any business or individual that wants to survive must make the right decision. This is determined by the accounting information system of such business or firm. The era of use of the thumb is gone; employing it is a sure way to failure.

Accounting Information Systems (A.I.S.) plays a central role in organizational learning, prompting claims that "the aim of the design of A.I.S. is quite simply to improve organizational learning. It has been observed that despite its importance most organizations do not make use of A.I.S which jeopardizes the efficient running of their organization. To be competitive and ensure proper reporting of organizational financial reporting it behooves on organizations to adopt its use.

Accounting Information systems produce information used in the business environment for various functions: business analysis, fundamental analysis, strategic management and planning, business valuation, feasibility studies, accurate and effecting costing, investment analysis and appraisal, fighting fraud, and variance analysis. The implication of lack of use of accounting information systems is that the organizations may not fulfill their statutory obligations of collecting, preparing and publishing accounting information and statements accurately. Secondly, organizations that do not use AIS will not provide accurate and reliable financial data to their users and thirdly, organizations that do not use AIS may not protect their accounting data from theft or breach.

Objectives of the Study

The broad objective is to examine the Role of Accounting Information Systems on Organizational Performance, while this specific objective was formulated.

1. To determine the extent to which accounting information systems enhance the profitability of Nigeria Bottling Company.

Research Question

The following research questions are formulated and tested in this study:

1. To what extent do the accounting information systems enhance the profitability of Nigerian Bottling Company?

Research Hypothesis

H_1: Accounting information systems have significant positive effect on the profitability of Nigeria Bottling Company.

Review of Related Literature

2.1 Conceptual Framework of the Study

Concept of Accounting Information Systems:

Accounting Information Systems have been widely adopted by organizations within both the public and private sector (Rom & Rohde, 2007). Accounting information systems is defined as systems that operate functions of data gathering, processing, categorizing and reporting financial events with the aim of providing relevant information for the purpose of store keeping, attention directing and decision making(Boockhodt;1999). Accounting information system is a specialized subsystem of the information system that collects, processes, and reports information related to the financial aspects of business events (Ulrich, & GeLinas, 2008). Accounting information system is a computer-based system that increases the control and enhances the corporation inside the organization (Essex& Magal; 1998). Accounting Information Systems maintain and produce the data used by organizations to plan, evaluate, and diagnose the dynamics of operations and financial circumstances (Anthony et al, cited in Xu, & Al-Hakim ,2005). An accounting information system (AIS) is a system that first collects and stores data and then processes it into information used by decision makers (investors, creditors, and managers). This information generated from an AIS can ultimately help decision makers manage organizations more efficiently and strategically. Accounting information system is a system that processes financial information and supports decision tasks in the context of coordination and control of organizational activities. It is defined as a subsystem of an information system, and its function is to process financial transaction and non financial transactions that directly affect the processing of financial transactions (Emeka-Nwokeji, 2012). Though an accounting information system can be prepared manually, today the term AIS is most commonly referred to as a complex computer-based system combining the resources and capability of information technology with traditional accounting methods and controls (Romney,& Steinbart, 2009).

Accounting has been defined broadly as "the process of identifying, measuring and communicating economic information to permit informed judgments and decisions by users of information"(Okechukwu: 2009).

On the other hand, it can also be defined as "a system of principles and techniques which permits a series of inter-related activities that form a progression of steps, beginning with observing collecting, recording, analyzing and finally communicating information" (Edward:1976).

Accounting information is therefore, data organized for the special purpose of decision making.

Egbuonu posits that accounting as the recording and analysis of economic transactions in monetary terms and forecasting of future activities as part of management information system, thus highlighting the use of accounting in planning(Okechukwu: 2009).

Concept of Information

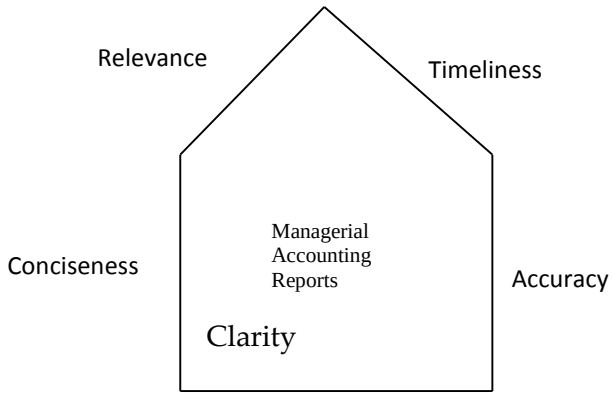
Information is defined in the dictionary of business and management as "That which is assigned to data by means of convention used in their representation. Information consists of data that have been retrieved, processed or otherwise used for information or inference purpose, augment or as basis for forecasting and decision making".

The Encyclopedia of professional management states that information must be distinguished from data and this distinction is important. Data are merely facts and figures that have little to do with making decisions while information on the other hand is essential raw material for making decisions. (Encyclopedia for professional management: 2010)

Accounting information system is the net work of activities of the organization responsible for the information obtained from transaction of data for the purpose of internal reporting to management for use in planning and controlling current and future operation, and external reporting to stock holder, government and other extend users. (Murdick: 2010).

2.1.3: Characteristics of Accounting Information

The usefulness of the accounts report management depends on the characteristics presented in the diagram below:



(Warren CS and Fess Philip E: 1986)

Relevance means that the accounting specific action is being considered by management.

In applying the concept of relevance, it is important to recognize that some accounting information may have a high degree of relevance for one use but may have little or no relevance for one another.

Timeliness refers to the need for accounting report to contain them most up to data information. In many cases, outdated data can lead to unwise decision.

In some cases, the timeliness concept may require the accountant to prepare reports on a pre-arranged schedule such as daily weekly or monthly. In other case, reports are prepared on a regular basis or only when needed.

Accuracy refers to the need for the report to be correct within the constraints of the use of the reports and the inherent in accuracies in the measurement process.

Clarity refers to the need for report to be clear and understandable on format. And content reports that are clear and understandable should enable management focus on significant factor in planning and controlling operations, that is reports on actual and expected costs in standard cost and variance analysis.

2.2 **Concept of Organizational Performance**

Richard et al. (2009) posit that organizational performance consist of three specific areas of firm's outcomes: (a) financial performance which includes profits, return on assets, return on investment, (b) product market performance which comprises of sales, market share, etc; and (c) shareholder return which consist of total shareholder return, economic value added, and so on.

Rolstadas (1998) opines that the performance of an organizational system is a complex relationship involving seven performance criteria that must be adhered to and they are effectiveness, efficiency, quality, productivity, quality of work, innovation and profitability. Performance is closely related to the achievement of the criteria listed above, which can be regarded as performance objectives. Neely (2002) opines that performance should consider quantifying the efficiency and effectiveness of actions. This quantification can be expressed both qualitatively and quantitatively. Kane (1996) argues that the performance is "something that a person leaves behind and which exists outside the said purpose". According to Kane, performance is defined at the level of each individual within the organization or at organizational level. It is perceived as an understanding of the achieved results. Performance of teams and individuals must take into account both inputs (behaviour) and outputs (results). Hartle (1995),argues that this is the "Mixed model" of performance management, covering both Annals of the skill levels and achievements, and goal setting and analysis of the results.

2.5 Emperical Review

Odetayo t.a (2013) conducted a research aimed, based on empirical evidence, at measuring the relationship between the use of the accounting information system (AIS) by the small and medium sized enterprises (SMEs) in Spain, and firms improved performance indicators and productivity. This empirical study is based on a survey carried out among small and medium sized firms to ascertain the extent to which development and implementation of accounting information systems had taken place, and subsequently an analysis was made as to how much this introduction may impact on improvement in outcome indicators and productivity. This research provides value added in accounting literature given the scarcity of works dealing with the relationship between the application and use of AIS and performance and productivity indicators in SMEs in Spain

Methodology

3.1 Research Design

Survey research design was used in this study this is because it exposes the phenomenon to reconcile such phenomenon.

3.2 Sources of Data

The data used for the study were gathered from two sources namely: primary source of data and secondary source of data.

3.3 Population of the Study

Population which is all the conceivable elements that make up a group was used. The researcher studied the members of staff of Nigerian Bottling Company Plc 9th Mile Corner Enugu. The breakdown of the population is as follows

The population of study is 140 staff of Nigerian Bottling Company 9th Mile Corner, Enugu. Department	No.
Accounting	45
Production	29
Marketing	30
Total	140

Source: Personnel Audit NBL. 2019

3.4 Sample Size and Determination Technique

The sample size is determined by using BOWLEY'S Formula**:**

Sample size:

$$n = \frac{N}{1+n(e)}$$ 2

Where:

n = Sample size

N = Population

E = level of significance

Application N = 140

e = 0.05

Substituting $n = \frac{140}{1+140(0.05)}$

$$n = \frac{140}{1+140\,(0.0025)}$$ 2

$$n = \frac{140}{1+0.35}$$

$$n = \frac{140}{1.35}$$

n = 104

3.5 Instrument for Data Collection

The researcher used questionnaire to collect relevant data. The questionnaire was developed under the guidance of the supervisor who also approved it.

The researcher used the 4 points liked scale of strongly agreed, agreed, disagree and strongly disagree.

3.6 . Validity of Research Instruments

Osuala, (1982), posits that validity is a process of finding out the degree to which the research or test measured what it is supposed to measure. The researcher used content validity in which he presented his work to his supervisor who confirmed that the research instrument measured what is supposed to measure. This group of respondents had the same characteristics as the main group. For this study the result from the test showed that the pilot test maintained a focus in their scoring and as such the researcher adjusted so that the main sample group would do the same thing.

3.7 Reliability of the Research Instrument

Ogili (2005) opines that reliability of an instrument is a process of obtaining information in the degree in which it measures similar result for the same subject at different times or under different conditions on a consistent, dependable, stable, predictable and accurate way.

In performing the reliability of the instrument, the researcher used the test-re-test technique. The researcher after two weeks re-administered another sets of the same copies of the questionnaire to 20 respondents when the result was drawn the two results were compared and proved to have the same result.

3.8 Method of Data Analysis

The researchers used simple percentages and tables in analyzing this work. First, the data were presented in tables using frequency distribution, and simple percentages. The hypotheses were tested using the chi-square statistical tool.

Where: Chi-square formula

$$\text{Chi-square } (x^2) = \sum \frac{(o-e)}{e}$$

Where: X^2= chi-square

- o = observed frequency
- e = expected frequency
- $\sum$ = summation symbol

Data Presentation, Analysis and Discussion of Findings.

4.1: Presentation of Data

In this chapter there was data presentation; analysis and discussion of findings which were drawn from questionnaire collected for this work.

TABLE 4.1 Distribution of questionnaire & rate of responses

Department	No of Questionnaires Administered	No Returned	%	No of valid Questionnaires	% of Valid Questionnaire
Accounting	45	43	42	40	36.46
Production	29	28	26	20	19.23
Marketing	30	29	28	25	24.03
Total	104	100	96	85	79.72

Source: field survey, 2019.

From the table, 104 copies of questionnaire were distributed and 100 were returned, 15 out of 100 were discarded, 4 were not returned. Consequently, 85 copies of questionnaire were analyzed.

Presentation and analysis of data according to research questions

Table 4.1.2: To what extent does the accounting information adopted by the organization has a positive impact in the profitability of the company?

Responses	Frequency	Percentage
To a very large extent	45	53
To a large extent	20	24
To a very low extent	5	5
To a low extent	15	18
Total	85	100

Source: field survey, 2019

The table 4.1.2 shows that forty-five (45) of the respondents representing 53% agreed that accounting information adopted by their organization has to a very large extent impact on the profitability of their company, twenty (20) respondents representing 24% agreed to a large extent that accounting information has positive impact in the growth of the company, while five (5) respondents representing 5% agreed to a low extent that accounting information adopted by the organization has a positive impact in the growth of the company while the remaining fifteen (15) representing 18% agreed to a low extent that accounting information adopted by the organization has positive impact in the company's growth. This implies that greater number of the respondents agreed that accounting information adopted by their organization has to a very large extent impact on the profitability of their company.

4.2 Testing of Hypotheses

The hypotheses earlier stated in chapter one was tested in this section using the chi-square as preferred statistical tool. A table of frequency distribution was first constructed to enable the computation of the frequency.

Hypothesis One

H_{01}: Accounting information system does not have significant positive effect on the profitability of Nigeria Bottling Company.

HA1: Accounting information system has positive significant effect on the profitability of Nigeria Bottling Company.

Contingency table 1

Responses	**Frequency**	**Percentage**
To a very large extent	45	53
To a large extent	20	24
To a very low extent	5	6
To a low extent	15	18
Total	85	100

Source: field survey, 2019.

To obtain the calculated value, the researcher used the formula.

Chi-square (x^2) = $\sum \frac{(o-e)}{e}$

Where: X^2= chi-square

o = observed frequency

e = expected frequency

$\sum$ = summation symbol

Chi-square (x^2)

o	**B**	**o-e**	**$(o-e)^2$**	**$(o-e)^2 \div e$**
45	21.25	23.75	564.0625	26.54
20	21.25	-1.25	1.5625	0.07
5	21.25	-16.25	264.0625	12.43
15	21.25	-6.25	39.0625	1.68
85	85			$\sum$= 40.72

Source: field survey, 2019.

Therefore, x^2= 40.72

The degree of freedom was determined by the formula:

d.f= (R-1)

d.f= 4-1

= 3

At 5% level of significance = 0.05

Calculated x^2 = 40.72

Critical value x^2 (x^2 cal) = 7.81

Therefore, x^2 calculated > x^2 critical value

40.72 > 7.81

Decision

Since the value of x^2 c Calculated x^2 calculated is greater than the value on the table, (cal = 40.72>(x^2 tab) = 7.81), the researcher accepted the alternative hypothesis (HA) which states that the accounting information system had positive significant effect on the profitability of Nigeria Bottling Company.

4.3 Discussion of Findings.

The researchers identified the followings:

First, that forty-five (45) of the respondents representing 53% agreed that accounting information adopted by their organization has to a very large extent impact on the profitability of their company, twenty (20) respondents representing 24% agreed to a large extent that accounting information has positive impact in the growth of the company, while five (5) respondents representing 5% agreed to a low extent that accounting information adopted by the organization has a positive impact in the growth of the company while the remaining fifteen (15) representing 18% agreed to a low extent that accounting information adopted by the organization has positive impact in the company's growth. This implies that greater number of the respondents agreed that accounting information adopted by their organization has to a very large extent impact on the profitability of their company.

Summary of Findings, Conclusion and Recommendations

5.1 Summary of Findings

The researchers found this.

(1) It was found that the accounting information system had positive significant effect on the profitability of Nigeria Bottling Company, with (x^2cal= 40.72>(x^2 tab) = 7.81).

5.2 Conclusion

From the findings recorded above it is imperative that accounting information system is inevitable in the overall performance of the organization. With proper accounting information it can help the organization plan and making far reaching decisions.

Costing accounting and financial accounting contribute immensely to the overall financial information system of an organization.

5.3 Recommendations

The researchers recommended that based on this research finding,

(1) It was recommended that the accounting information system should be adopted by the Nigeria Bottling Company since it has positive significant on their profitability, as it will help them have superior performance that will lead to investors having trust on their investment.

5.4 Contribution to Knowledge

This work has contributed to knowledge because despite that there were other studies done in this area, but variables in the objectives are not the same. The methodology used also differed. It also exposes the impacts, effective, efficient and enhancement of accounting information system to an organization such as Nigerian Bottling Company 9th Mile Corner, Enugu.

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