ISSN 2201-2796

ACCOUNTING INFORMATION SYSTEM AS AIDS TO MANAGERIAL PERFORMANCES

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Abstract: **Accounting information is indispensable in managing activities of any organization; it provides quantitative information about economic entities. Management are constantly faced with the problem of decision making, coordinating, directing and controlling; it is therefore essential for them to have access to good accounting information for proper and accurate decision making, maximization of profit and optimal utilization of scarce resources. Data were gathered to analyse the relationship between accounting information system and strategic decision making process, it was analysed using Pearson correlation coefficient through SPSS. The study uncovers that accounting information system is indispensable to the activities of management in academic institutions especially private set up in Nigeria, there was strong positive correlation between the two variables; implying that accounting information system strongly influence and enhances strategic decision making in the organization.**

Index Terms: Accounting information system, University, Control, Strategic decision making, Performances

I. Introduction

Management are engaged with different types of activities that require quality and reliable information. Anderson and Caldwell (1981) as cited in Okoli (2012) explained Accounting as an information system for measuring, processing and communicating information that is useful in making economic decision. Bocholt (1999) defined Accounting Information System as systems that operate the functions of data gathering, processing, categorising and reporting financial events with the aim of providing relevant information for the purpose of record keeping, attention directing and decision making. The main function of Accounting Information Systems (AIS) is to assign quantitative value to the past, present and future economics events. Accounting information system produces the financial statements namely income statements, statements of financial positions and cash flow statement etc. of which the sources are internally derived by the Accountants who are the major supply of accounting information and the accounting department are central to all the units in an organization.

Nikolaou (2000) as cited in Adebayo, Idowu and Bolarinwa (2013) explained that Accounting Information Systems is a computer based system that increases the control and enhances the cooperation in the organization.

The importance of accounting in measuring both financial and non-financial performances in an organization cannot be undermined. Otley (1980) as cited in Adebayo et al (2013) argued that accounting systems are important part of the fabrics of organizational life and need to be evaluated in their wider managerial, organizational and environmental context. The effectiveness of accounting information system not only depends on the purposes of such systems but also depends on contingency factors of each organization. Accounting information systems are said to be effective when the information provided by them serves widely the requirements of the system users.

Shoommuang (2011) examined how effective management accounting implementation affect decision making by analysing the relationship between corporate strategy and top management. David and Marcel (2006) analysed the relationship between management style and management accounting system and the effect on organizational performance and concluded that accounting information system is designed to transmit information to the decision makers, having capacity to influence the orientation, direction and formality of the decision making style. A proactive management style would require an innovative Management accounting system design to cope with the uncertainty and to optimise decision making whereas a reactive management style would require traditional management accounting information system to provide information suitable for managing routine, regular and programmable activities.

Brigitte and Wolfgang (2013) emphasized the importance of information requirements for managers in decision making when there is absence of agency conflicts, they argued that information available to managers in managing business is the same information available to investors in assessing performance and future prospects. They concentrated on two central useful qualitative characteristics of accounting information: predictive ability and feedback value. Pfaff (1995) as cited in Brigitte and Wolfgang (2013) explained that decisions need to be re-evaluated periodically, the decision-maker wants to decide whether to continue without change or whether to abandon or alter the course of action in question; for this purpose, performance in the sense of the progress along the lines of the original plans needs to be determined; decisions are based on a comparison of projections as well as with the alternatives hence the need for forward looking information as well as control information.

II. Objective

The aim of this study is to uncover the roles played by accounting information in determining the management efficiency and performance in an organization. It seeks to examine the relationship that exists between accounting information system and strategic decision making process.

III. Statement of Problem

The success of any organization in decision making, planning and controlling depends on the availability of the information at her disposal. It was observed that many organizations have been inefficient as a result of inadequate, irrelevant, unreliable and untimely information upon which their actions was based, thereby having overall negative effect in the organization and putting the organization at a disadvantageous position. Also the going concern of any organizations depends on its ability to meet its target objectives to justify its existence, and this objectives can be met when relevant and accurate information are available, where effective and efficient accounting systems are lacking, the organization would wind up and its contribution to the society would be lost, hence this study seeks to uncover how accounting information system has aided managerial performances and efficiency of selected private academic institutions in Ondo state, Osun state and Ekiti state in Nigeria.

IV. Literature Review

Accounting Information System

Laudon and Laudon (2007) defined accounting information system (AIS) as the basic unit of interconnected components that collect, process, store and distribute information to support decision making and controlling within an organization; records, summarizes, and communicates the various transactions of a company. Accounting information systems vary widely, ranging from manual to highly complex electronic systems in other organizations. However, different their forms, all accounting systems are built to capture and report the effects of a company's accounting transactions. The components of information system are Information Technology, people, process, and structure; accounting information system was grouped into two subsystems: the technical subsystem and social subsystem. The technical subsystem comprised of technology and processes i.e. the portion of the information system that does not include human elements; the social subsystem, comprised of people and people in relation to one another i.e. the human element of Information System

Types of Accounting Information Systems

There are different types of accounting information systems used in business organizations, the size of the organization, the nature of its processes, the extent of computerization, and the philosophy of management all affect the choice of system. In Ayoola-Akinjobi (2013) Accounting information system was categorized into manual system, computer-based transaction systems and database

Manual System: It utilizes paper-based journals and ledgers. Manual system is labour intensive for it relies on human processing and it may be prone to error.

Computer-Based Transaction System: Accounting data are kept separately from other operating data; there is a greater degree of compartmentalization of work in order to preserve the integrity of accounting information system. Treatment of information is the same with that of the manual system. The only difference is that the user here is simply filing in a computer screen that looks and often acts as the source document of the transaction.

Database Systems: This system captures both financial and non-financial data, and then it stores that information in the data warehouse. It reduces inefficiencies and information redundancies. Examples are the relational database systems such as enterprise resource planning (ERP)

The Users of Accounting Information

Lucey (2005) listed the users of accounting information in typical business, organisations and parastatals as follows:

i. The proprietor: business owners use it for business and profit forecast and for knowledge on drawing limits from business without affecting it.
ii. Prospective investors: it provides enough basis of assessing the organization for decision making in whether or not to invest into the form.
iii. Creditors/supplier: the creditors will want to know whether the amount owing to them will be paid as at when due.
iv. Customers: they have an interest in continuation of the enterprise especially when they have long term involvement with, or are dependent on the enterprise.
v. Government and their agencies: they are interested in the allocation of resources and activities of enterprise; they determine tax policies as the basis for national income.

Functions of Accounting Information System

The main function of Accounting Information System (AIS) is to assign quantitative value to the past, present and future economics events. AIS produce the financial statements namely income statements, statement of financial position and cash flow statement. The system will process the data and transform them into accounting information that will be used by a wide variety of users such as internal and external users.

Accounting and Performance Measurement

Performance evaluation are activities that ensure that goals are consistently being met in an effective and efficient manner. Accounting systems affect behaviours and performances across department, organizations and even countries. The quality of the information provided is imperative to the success of the systems.

Management is engaged with different types of activities which require good quality and reliable information. Quality information is one of the competitive advantages for an organizations business, organizations use accounting information system to provide support for management decisions. Supports usually includes financial analysis from company accountants. Management compares information about current performance to budgets, forecast, prior periods or other benchmarks to measure the extent to which goals and objectives are being achieved and to identify unexpected results or unusual conditions that requires follow-up.

Managers are primarily responsible for identifying the financial and compliance risks for their operations, they also have line responsibility for designing, implementing and monitoring their internal control system. Internal controls typically centre on the company's accounting information system, which is the primary function for moving financial information through a company. Therefore, internal controls help managers to monitor and measure the effectiveness of their accounting operations on performance.

In managing an organization and implementing an internal control system the role of accounting information system (AIS) is crucial. An important question in the field of accounting and management decision-making concerns the fit of AIS with organizational requirements for information communication and control. Although the information generated from an accounting information system can be effective in decision-making process, purchase, installation and usage of such a system are beneficial when the benefits exceed its costs.

Huber (1990) as cited in Asefoh et al (2011) agrees that automated accounting information system aids decision making for management of organisations. Benefits of accounting information system can be evaluated by its impacts on improved decision making process, quality of accounting information, performance evaluation, internal controls and facilitating company's transactions.

Armstrong & Baron (1998) as cited in Jean (2001) explained that performance management play a key role in improving the overall value of an organization with accounting system being the most important source of information in organization. They are designed to provide all levels of management with timely and reasonably accurate information which have effect on performance management and help them make decisions which are in agreement with their organization's goal.

ISSN 2201-2796

AIS and Organizational Effectiveness

Organizational effectiveness was defined by Daft (1983) as cited in Siamek (2012) as the degree to which an organization realizes its goals. However, Mondy (1990) as cited in Shoommuangpank (2011) defined it as the degree to which an organization produce the intended output. Organizations pursue multiple goals, and such goals must be achieved in the face of limited resources and disagreement among interest groups. Oguntimehin (2001) as cited in Onaolapo and Odetayo (2012) submitted that organizational effectiveness is the ability to produce desire results.

Ponemon and Nagida (1990) as cited in Siyanbola (2012) also asserted that the main reason for which accounting information is generated is to facilitate decision making; however, for financial reporting to be effective, among other requirements, it must be relevant, complete and reliable. These qualitative characteristics require that the information must not be unfair nor has predisposition of favouring one party over the others. Accounting information should give a decision maker the capacity to predict future actions.

Saleh (2010) investigated the relationship between automated accounting information system and organizational effectiveness; and revealed that there was strong relationship between accounting information system and organizational effectiveness, which means access to accounting information, will lead to organizational effectiveness.

Accounting Information System and Control

Boockholdt (1999) stated that every organization has controls of three types: top management, financial and internal control.

i. Top Management Controls: This include the basic distinguishes features of the enterprise: its mission, long – range goals and objectives, organizational structure, position description and staffing

ii. Financial controls: it ensures financial resources are available to carry out management operational plans, instruments used are budgeting and performance reporting, it requires management to plan and then compare its plans with the actual results of its operation.

iii. Internal control: it includes quality control and security control in data processing, and ensure that these activities are conducted properly.

V. Theoretical Review

System Theory: Kaufmann (1966) as cited in Sugut (2014) developed systems to explain historical development as a dynamic process; it was fully developed by biologist Bertalanffy (1968) as cited in Sugut (2014) who argued that everything is interconnected and therefore should be studied in order to understand the world. The system theory method of analyses involves, first the breaking down of what is to be explained into smaller components i.e. the phenomenon under consideration. Secondly, the formulation of explanation that account for the behaviour of properties of the components separately and finally synthesises of these explanations into an aggregate of the whole. General system theory like other innovative frameworks of thought passes through phases of ridicule and neglect. It has benefitted from the parallel emergence and rise to eminence of cybernetics and information theory.

Agency Theory: It emerges out of the principles of separation of ownership and control, focusing on the relationship between the principal (i.e. the shareholders) and the agents (i.e. the managers). Shareholders (who are the owners or principals of the company) hire agents to perform work, while the principal delegate the running of the business to directors or managers (who are the shareholders agents). The theory focuses on problems that can arise when the principal contracts with the agents to make decision on behalf of the principals.

Ideally, shareholders expect the agent to act and make decisions in the principal's interest. However, the agent may hide information and manage firms in their own interest like in the case of Enron, Worldcom etc.

David and Marcel (2006) suggested that two major factors influence the prominence of agency theory. One, the theory is conceptually and simple by reducing participant to two i.e. the managers and the shareholders. Secondly, it was argued that managers pursued self-interest to the detriment of the shareholders. However, the setback has been overcome by accepting certain agency costs as either incentives or sanctions to align both executives and shareholders interest.

Stewardship Theory: It has its roots in psychology and sociology; based on the assumption that the interest of shareholders and the interest of managers are aligned; hence management is motivated to take decisions that would maximise firm's performance and total value. The theory advocates that there is greater utility in cooperative than individualistic behaviour i.e. managers maximise their utility functions while maximising shareholders wealth. Thus, stewardship theory recognises the need for executives to act more autonomously to maximize the shareholders returns they integrate their goals as part of the organization hence are satisfied and motivated when organization goals are attained.

Five components of the management philosophy of stewardship was identified as trust, open communication, empowerment, long term orientation and performance enhancement. It was argued that the executives and directors are inclined to protect their reputations by ensuring that their organisations are properly operated to maximise financial performance.

VI. Methodology

Questionnaires were the major tool used to gather data from the source. The questionnaires which were drafted using 5-likert scale (agree, strongly agree, disagree, strongly disagree, undecided) contained twenty questions in all, analysing the efficiency of accounting information system as aids to managerial performances in academic institutions. Data were gathered and the hypothesis was analysed through Pearson correlation coefficient using SPSS.

Correlations serve as empirical indications of possible relationships between variables. The strength of a linear relationship can be measured for quantitative variables by using the Pearson correlation coefficient. The values of the correlation coefficient can range from -1 to +1. The summary of the types of relationship and their correlation coefficients were given below:

Correlation types and coefficients

Correlation Type	Correlation Coefficient (r)
Perfect negative Correlation	$r = -1$
Negative	$-1 < r < 0$
No Correlation	$r = 0$
Positive	$0 < r < 1$
Perfect Positive Correlation	$r = 1$

The higher the correlation coefficient, regardless of sign, the stronger the linear relationship between the two variables is. A positive correlation implies that as the values of one of the variables increase, the values of the other variable tend to increase also. On the other hand, a negative correlation implies that as the values of one of the variables increase, the values of the other variable tend to decrease. A small or 0 correlation implies that the two variables do not have a linear relationship.

Hypothesis

There is no significant relationship between accounting information system and strategic decision making.

Data Analysis

Descriptive Statistics

	Mean	Std. Deviation	N
AIS	2.32	1.308	60
Strategic decision making	1.92	1.062	60

		AIS	Strategic decision making
AIS	Pearson Correlation	1	.349**
	Sig. (2-tailed)		.006
	N	60	60
Strategic decision making	Pearson Correlation	.349**	1
	Sig. (2-tailed)	.006	
	N	60	60

**. Correlation is significant at the 0.01 level (2-tailed).

PEARSON CORRELATION

The relationship between accounting information system and strategic decision making was investigated using Pearson correlation coefficient. Preliminary analysis were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. There was average, positive correlation between the two variables, $r = .349$, $n = 60$, $p = .006$ (compared to significant level at $< .01$). The null hypothesis was rejected because there is moderate, positive relationship between the two variables, thus accounting information system affects strategic decision making in the organization; as the usage of accounting information system increases, the quality of strategic decision made was enhanced. The findings tallies with the empirical work of Royaee, Saleh and Asemah (2012) which revealed that accounting and financial information are widely used in managerial decision. In similar vein, it confirms the study of Eugenia and Tiberiu, (2013) affirming that accounting information is the only survival strategy that most management used in planning for a long period of time.

VII. Recommendations

Based on my findings from this study, the following recommendations are made

- To better appreciate the value of accounting information in strategic decision making, Institutions should from time to time engage personnel in developmental programmes locally and abroad.
- Experienced and competent professional accountant should be employed in order to assist in providing valuable information and keeping of accurate records of accounts for effective decision making.
- The educational institutions should endeavour to upgrade their accounting facilities and enforce division of responsibilities to enhance effective decision making.

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