ENHANCING THE EFFICIENCY OF ACCOUNTING INFORMATION SYSTEM IN ORGANIZATIONS

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ABSTRACT

Accounting information system is the mechanics from which dependable information can be provided for users to make informed decisions. Exploratory research deign was adopted to extract data from existing literature which help in meeting the research objectives. This study instigates the means of achieving efficient accounting information system. It identified three types of organizations: service, merchandising and manufacturing, which may vary in size, nature and purpose, but all requiring information for continuous survival. Proper documentation, controls, communication and monitoring were identified as factors that will make for efficient accounting information system. The study recommends ethical orientation for staff, effective communication, prompt capturing/recoding of transactions and regular review of internal controls.
Keywords: *AIS, dependable information, effective communication.*

INTRODUCTION

Organizations today are changing rapidly and growing in complexities. This is due to the nature of environmental climate brought about by fast-paced developments as a result of globalization and information and communication technology (ICT). Organizations must develop, implement techniques for continuous improvements in achieving efficiency, and assure stakeholders of the continuous viability and profitability of their respective establishments. A pre-condition for achieving this objective is the provision of reliable and relevant information which is the primary tool for management control. The information system is what will allow managers to understand the operation of the organization, to scan the environment, and to anticipate the impact of their actions.

Generally, organizations may be classified as service, merchandising and manufacturing depending on the nature of activities, engaged on. Each of these classes of organizations need dependable information to enable managers plan, control and take informed decisions. Accounting Information System (AIS) is the mechanics from which the dependable information can be provided, as it is a feeder information system. The information processed in an accounting information system come from sources internal and external to the organization and is used by all levels of management to make decisions that in turn affect the organization both internally and externally.

In the above context, therefore, a precondition for reliable and relevant information is the prompt recording and proper classification of transactions and events. Pertinent information should be identified, captured and communicated in a form and time frame that would enable staff to carry out their duties and other responsibilities (timely communication to the right people). Information systems produce reports that contain operational, financial, non-financial and compliance-related information and that make it possible to run and control the operation. They deal not only with internally generated data, but also information about external events, activities and conditions necessary to enable decision-making and reporting. Management's ability to make appropriate decisions is affected by the quality of information which implies that the information should be appropriate, timely, current, accurate and accessible.

The implication is that when there is a slack or pitfall in the recording system, chances are that fraudulent transactions, partial shipment, misstatement of inventory and cost of sales, operating problems, duplicate payments, customers returns improperly treated and liabilities recorded for goods and services not received/billed may take place. Hence, wastage of organizational scarce resources may be observed. It is therefore necessary that factors that can enhance the efficiency of the accounting information system in an organization be identified with a view to strengthening or correcting them, so that information provided by the accounting system can be of immense benefit to the organization and the entire stakeholders, on realization of the organization's objectives. This is because the fundamental objective of corporate reports is to communicate economic measurement of and information about the resources and performance of the reporting entity useful to those having reasonable rights to such information. Therefore, the main objective underlying this study is to investigate what can enhance the efficiency of accounting information system in organizations, to make appropriate recommendations where necessary on further improvements. Specifically, the study examines relevant literature with a view to determining answers to the tentative questions formulated for the study. These are:

i What constitute efficiency of a system;
ii If proper controls can enhance the AIS efficiency;
iii How proper documentation can enhance the efficiency of AIS;
iv Whether effective communication is necessary for enhancement of efficiency of AIS.

This study deals with accounting information system efficiency in all categories of organizations though such organizations may vary in size, nature and purpose. Since certain aspects of system functionality are basic to all organizations, this study covers all organizations (service, merchandising or manufacturing). Because of time constraint and due to the fact that much information exist in the form of literature, the evaluation of factors that can account for the efficiency of accounting information system are explored from secondary source. Although, a survey design could have as well been appropriate. However, it is believed that the data explored were sufficient to give reasonable conclusion and coverage of the area of interest.

THE CONCEPT OF ACCOUNTING INFORMATION SYSTEM

Accounting Information System as a collection of resources, such is people and equipment, designed to transform financial and other data into information (Bodnar and Hopwood, 1995). This information is communicated to a wide variety of decision makers. Accounting information systems perform this transformation whether they are essentially manual systems or thoroughly computerized.

Robinson, Davis and Alderman (1986) sees accounting information system to encompass the processes and procedures by which an organization's financial information is received, registered, recoded, handled, processed, stored, reported, and ultimately disposed of. They went on to say that accounting products (financial statements) are prepared for two separate user groups, each with different interests, needs, and points of view. One group is external to the corporate body in an operational sense and is concerned principally with the financial strength and performance of the business. The other group is internal management and focuses primarily on (i) organizational planning through the use of budgets and (ii) data refined for use in control and decision making. Thus, we may expect to observe information systems designed to produce financial information for general use and tailored to communicate specifically with outsiders (financial accounting system) or managerial accounting systems, uniquely serve management need to (i) control operations and make responsibility assignments and (ii) effectively on the organizations financial activities through operations budgets.

The ability of a manager to use its resources efficiently and effectively depends on how effective it organization's accounting information system is. Therefore, the role of accounting information system in the success and well being of any business cannot be over emphasized. For a business to be properly run, adequate and timely accounting system must be put in place, whose function is to provide adequate, timely and reliable financial data necessary to manage the affairs of the organization. It is pertinent to note that, poor record keeping and communication has resulted in the failure of many businesses in developed and developing countries. The truth of this could be seen in Enron and Cadbury cases (www.google.com).

Accounting information system combines the study and practice of accounting with the design, implementation and monitoring of information systems. Such systems use modern information technology resources together with traditional accounting controls and methods to provide users the financial information necessary to manage their organizations. The impact of accounting information system could be explained by the effectiveness and efficiency of the system when it automatically calls the attention of management to areas that deviate from the pre determined standards. Accounting has developed over time, an essential stewardship function which enables owners of the resources of a business to extract accountability from the managers who are entrusted with the task of running the organization.

The custodianship function is at the root of corporate governance, and provides the basis for the sacred trust upon which modern business is built. In the fulfillment of this general objective, accounting satisfies two basic functions: a measurement function and a communication function. It seeks to ascertain the result of a period of trading and business operation, the flows and ebbs in an organization's financial position, the extent of value added after a period of operation, and the liquid resources available to the firm to settle its maturing obligations and oil the machinery of production. Once the measurement process is complete, it is communicated to interested parties in the form of standard reports. Thus, the accounting report (information) is the tool employed by accountants to measure and communicate the affairs of the business entities. These reports fall into three broad categories - external reports, routine internal reports and non-routine internal reports. Meeting the objectives of these reports, requires factual, reliable and relevant information generated through the information system for which accounting information system is the most pervasive.

THE CONCEPT OF ORGANIZATIONS

Robinson, et al (1986) categorized organizations into three major groups according to their economic purposes (a) those that provide a service, (b) those that buy and distribute a product, and (c) those that manufacture and distribute a product. Each of these operational forms engages in internal activities geared in accomplishing their individual objectives. The service organization receives revenues generated largely from the performance of specialized services and is only minimally affected by the transfer of inventory costs to the customer. The entire process of performing the function, billing the customer, and collecting the receivable can be viewed as a cycle of events. Similarly, the merchandising company appears to be involved in two unique cycles or activity: the process of acquiring and holding merchandise for resale to customers and the separate process of converting the inventory back into cash by selling it to the customers. The first groups of activities are called the expenditure (or spending) cycle and the second the revenue cycle. Manufacturing operations introduce a third cycle of internal activities interposed between the expenditure and revenue cycles, referred to as the conversion cycle which involves the transformation of raw materials acquired in the expenditure cycle into finished products for resale in the revenue cycle.

Many activities take place within these cycles which must be promptly recorded, analyzed and communicated on time to those who have right to such information, thereby permitting the making of informed decisions. The management information system responsible for these functions and the provision of relevant and reliable information is the accounting information sub-system which is all pervasive because it affects all aspect of organization's activities. Consequently, despite accounting information system varies significantly from one organization to another, depending on such factors as size, nature of operations and objectives, the sub-system must function efficiently to meet the objective of providing required information for management actions.

MEANS OF ACHIEVING EFFICIENT ACCOUNTING INFORMATION SYSTEM

An efficient accounting information system is one that provides quality information that should be appropriate, timely, current, and accessible. A precondition for these to be achieved is the prompt recording and proper classification of transactions and events, where necessary information is generated on timely basis, the information so generated is made available to the right person and the existence of proper and working controls. Whittington and Pany (2004) see an efficient accounting information system as one that should:

i Identify and record all valid transactions;

ii Describe on a timely basis the transactions in sufficient detail to permit proper classification of transactions for financial reporting;

iii Measure the value of transactions for financial reporting their proper monetary value in the financial statements;

iv Determine the time period in which transactions occurred to permit recording of transactions in the proper accounting period; and

v Present properly the transactions and related disclosures in the financial statement.

Whittington and Pany (2004) have also identified control activities which are policies and procedures that help ensure that management's directives are carried out, performance reviews and segregation of duties as prerequisite for efficient accounting information system. These policies and procedures promote actions that address the risks that face the organization. They also help to check the accuracy, completeness, and authorization of transactions.

Robinson, Davis and Alderman (1986) look at efficiency of accounting information system from the perspective of controls. They define control systems as subsystems within information systems that are within the accounting, over-accounting, and interrelated with accounting. Feedback systems and feed-forward systems were identified. The primary objective of control being to accomplish the directives of management that will satisfy systems equipments and, with the two control systems working together in an organization, provide strong assurances that management's plans and objectives are being properly attained. Thus, control monitors the system to ensure efficiency and effectiveness of operations. It could be system based, physical or transaction processing control.

Wilkinson and Cerullo (1997) emphasize the entity's organizational structure as a necessity for efficient accounting information system. A well-designed organizational structure provides a basis for planning, directing, and controlling operations. It provides authority, responsibilities and duties among members of an organization by dealing with such issues as centralized versus decentralized decision making and appropriate segregation of duties among the various departments. When management decision making is centralized and dominated by one individual, that individual's abilities and moral character are extremely important to the auditors. When a decentralized style is used, procedures to monitor the decision making of the money managers involved become equally important. The organizational structure of an entity should separate responsibilities for authorization of transactions, recordkeeping of transactions, and custody of assets. Thus, a functional organizational structure no matter how small in size, is important for generation of relevant information for management actions.

Bernard and Schipper (1994) focus on information and communication as essential to the realization of efficient accounting information system. This can be achieved by developing and maintaining reliable and relevant financial and non-financial information and communicating this information by means of a fair disclosure in timely reports. Information and communication relating to the organization's performance will create the possibility to evaluate the orderliness, ethicality, economy, efficiency and effectiveness of operations. In many cases, certain information has to be provided or communication has to take place in order to comply with laws and regulations.

Information is needed at all levels of an organization in order to have effective control and achieve the entity's objectives. Therefore, an array of pertinent, reliable and relevant information should be identified, captured and communicated in a form and timeframe that enable people to carry out their controls and other responsibilities. Transactions and events must be recorded promptly when they occur if information is to remain relevant and valuable to management in controlling operations and making decisions. This applies to the entire process or life cycle of a transaction or event, including the initiation and authorization, all stages while in process, and its final classification in summary records. It also applies to promptly updating all documentation to keep it relevant. Proper classification of transactions and events is also required to ensure that reliable information is available to management. This means organizing, categorizing and formatting information from which reports schedules, and financial statements are prepared. Management's ability to make appropriate decisions is affected by the quality of information is. The qualities are:

i Appropriate (Is the needed information there?);

ii Timely (Is it there when required?);

iii Current (Is it the latest available?)

iv Accurate (Is it correct?);

v Accessible (Can it be obtained easily by the relevant parties?)

In order to help ensure the quality of information and reporting, carrying out the control activities and responsibilities, make monitoring more effective and efficient, the control system as such, and all transactions and significant events should be fully and clearly documented (example flow charts and narratives). This documentation should be readily available for examination.

Documentation of the control system should include identification of the organization's structure and policies, its operating categories, related objectives and control procedures. And organization must have written evidence of the components of the control process, including its objectives and control activities. Effective communication should flow down, across and up the organization, throughout all components and the entire structure. All personnel should receive a clear message from top management that control responsibilities should be taken seriously. They should understand their own role in the information system, as well as how their individual activities relate to the work of others. There are also needs for effective communication with external parties. Information is a basis for communication, which must meet the expectation of groups and individuals, enabling them to carry out their responsibilities effectively. Effective communication should occur in all directions, flowing down, across and up the organization, throughout all components and the entire structure. With adequate means of communication put in place, obtaining information from external parties, as external communication can provide input that may have a highly significant impact on the extent to which the organization achieves its goals. The above scenarios can only be possible if the accounting information is efficient with proper controls put in place.

Barney (1991) directed his discussion on accounting information system efficiency to monitoring. Accounting system should be such that can monitor the various activities to assess the quality of the system's performance over time. Monitoring is accomplished through routine activities, separate evaluation or a combination of both. Ongoing monitoring is built into the normal recurring operating activities of an entity. It includes regular management and supervisory activities, and other actions personnel take in performing their duties. Ongoing monitoring activities cover each of the internal control components and involve action against irregular, unethical, uneconomical, inefficient and ineffective internal control systems. Separate evaluation depends primarily on an assessment of risks and the effectiveness of ongoing monitoring procedures. Specific separate evaluations cover the evaluation of the effectiveness of the internal control system and ensure that internal control achieves the desired results based on predefined methods and procedures. Internal control deficiencies should be reported to appropriate level of management.

Monitoring would ensure that audit findings and recommendations are adequately and promptly resolved. The combination of ongoing monitoring and separate evaluation will help ensure that accounting information system maintains its effectiveness and efficiency over time. Monitoring the system should include policies and procedures aimed at ensuring the findings of audits and other reviews are adequately and promptly resolve. Managers are to (1) promptly evaluate findings from audits and other reviews, including those showing deficiencies and recommendations reported by auditors and others who evaluate agencies, operations (2) determine proper actions in response to findings and recommendations from audits and reviews, and (3) complete, within established time frames, all actions that correct or otherwise resolve the matters brought to their attention. Properly designed and implemented, accounting information system helps in identifying deficiencies and correcting same, produces improvements, or demonstrates that transactions events warrant management action.

CONCLUSION AND RECOMMENDATIONS

Accounting information system (AIS) plays a fundamental role in the successful and continuous existence of organizations. It produces reports that contain operational, financial and non-financial as well as compliance operations. They deal not only with internally generated data, but also information about external events, activities and conditions necessary to enable decision-making and reporting. The concept of accounting information system combines the study and practice of accounting with design, implementation and monitoring of information systems. Such systems use modern information technology resources together with traditional accounting control and methods to provide users the financial information necessary to manage their organizations.

The study identifies the factors which make for efficient accounting information system to include: prompt recording (documentation) of transactions, proper controls being instituted, workable organization structure, effective communication and monitoring. These constituents properly designed, installed and implemented can avert or at least minimize the incidences of fraudulent dealings, partial shipment, misstatement of inventory and cost of sales, operating problems, duplicate payments, improper incurrence of liabilities among others, that is incidence of wastage of organizational resources. Attempt has been made in the course of the study to bring to light the need for an efficient accounting information system for the provision of quality information that is appropriate timely, current, accurate, reliable and accessible. It was noted that proper and adequate controls, organizational structure, effective communication and monitoring can by far make for efficient accounting information system. The study then made certain recommendations, which if implemented, will help reduce or minimize the incidences of risk associated with non-functional organizational system and the accompanying waste of resources.

Since information is the hub for management planning, controlling and decision making, it is pertinent that proper attention be paid to the sub-system which provides the information-accounting information system. Having identified some of the constituents that make for efficient accounting information system, the study makes the following recommendations:

i. There should be proper ethical orientation for organization's staff since no system can be 100% full-proofs without employee's honest commitment.

ii. Management should ensure there are adequate means of communicating with and obtaining information from both internal and external sources. That is, barriers or obstacles to free flow information should be removed.

iii. Management should put in place processes and procedures that will make for prompt capturing and recording of transactions and events in their true state to minimize the risk associated with flaws in documentation stage.

iv. The internal control systems should be regularly reviewed and weaknesses found corrected before they degenerate into a channel of wasting away organization's resources.

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