

Information Technology (IT) on Accounting System in an Organization

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Abstract

The emergence of information technology in accounting is an innovative system. Nowadays, most business entities, or institutions are aided by their accounting information systems in carrying out their operations, the Objective of this paper is to identify the benefits and the disadvantages of information technology (IT) on accounting systems of an organizations. This study made use of qualitative research design in gathering information and an observation method was applied to study some of the organizations like Anamco Nigeria ltd., J. B. Matrix Nig. Ltd and Sunrise Flour Mill. This method of design helps to gather the concepts definition, characteristics, benefits and shortcoming of the study. It was found out that the biggest impact of applying information technology is the ability of an organization to develop and use computerized systems to track and record financial transactions. Information technology networks and computer systems have also shortened the time needed by accountants to prepare and present financial information to management. This system also allows companies to create individual reports quickly and easily for management decision making. Other capabilities of computerized accounting systems are: increased functionality, improved accuracy, faster processing, and better external reporting. finally, this paper also highlights on the disadvantages of applying information technology (IT) in accounting systems, like Hackers, Scammers, and Internet Fraudsters etc. and recommendations were made on how to overcome these Fraudsters of using information technology in accounting system.

Keywords: *Information Technology (IT), Accounting, Accounting Systems, Internet Fraudsters*

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Background of the Study

Today we live in an information society in which more people must manage more information, which in turn requires more technological support, which both demands and creates more information. Electronic technology and information are mutually reinforcing phenomena, and one of the key aspects of living in the information society is the growing level of interactions we have with this complex and increasingly electronic environment. The primary tool of the information society is the computer. Microprocessors are used to improve the performance of other technologies, and computers are increasingly used to control and integrate other kinds of information technology (e.g. TV, radio, telephones). Dawes, 1997; Drucker, 1995; Tapscott and Caston, 1993. For example, one electronic mail message replaces the dictation of a memo which is then typed, copied and distributed. Electronic workflow processing allows operational reports to be stored and forwarded to appropriate units for follow-up without a host of manual intervening steps. One other thing that is crucial as far as ICTs are concerned is that, because of technological and communication innovations, geographic boundaries that once defined citizens, client and customer service jurisdiction no longer apply. The move toward e-commerce, e-banking and e-governance provides an excellent example of how organizations are no longer restricted to a contained geographic boundary. In this 21st century, organizations all over the world have come to realize that only those that overhaul the whole of their administrative systems and operations are likely to survive and prosper.

Statement of Problem

The advancements in information technology have led to the introduction of Computerized Accounting Systems in an organization to help produce financial reports for both management and external users for decision making (Greuning, 2006). The many advantages from the use of these systems have led many to conclude that Computerized Accounting Systems in Corporate Reporting is the „engine of growth“ in business organizations (Frenzel, 2006).

In spite of the benefit of computer to businesses in general, some problems are still left unsolved and new ones have been credited by the use of computer itself being a problem such as the use of computer to keep accounting records.

Another problem is the danger of computer fraud if proper level of control and security whether internal and external are not properly been instituted.

Objectives of the Study

The main objective of this study is to examine how the adoption of information technology affects the performance of an organization especially in Accounting System.

While specific objectives are:

- I. To assess the application of Information Technology on accounting system
- ii. To assess the effects of computerized accounting system on an entities

Review of Related Literature

Hyvönen (2003) determined that ERP systems increase the use of advanced managerial accounting techniques, such as ABC and Balanced Scorecard. Saban and Efeoglu (2012) stated that the ERP system causes a change in managerial accounting practices, in terms of providing global information flow and standardization, and that conventional managerial accounting procedures are eliminated after ERP (Caglio, 2003; Jack and Kholeif, 2008; Yeh, Lee and Pai, 2012; Saban and Efeoglu, 2012). Information technology systems cause a change in issues of budgeting and reporting, which are among the managerial accounting applications, and enable the increasing use of advanced managerial accounting techniques (Yeh, Lee and Pai, 2012; Saban and Efeoglu, 2012). This aspects could be stated that information technology have changed the roles of accountants in business from information collection, preparation, analysis to the part in the functions of control, interpretation, assessment and decision-making (Yeh, Lee and Pai, 2012; Saban and Efeoglu, 2012; Kloviene and Gimzauskiene, 2014). On the other hand, as information technologies are quickly developing, the accounting systems often do not support the business properly (Christauskas and Miseviciene, 2012) influencing the need to analyze accounting system compatibility with business environment.

Information Technology

Information Technology (IT) deals with the application of computers and telecommunications equipment to store, retrieve, transmit and manipulate data. This may also be described as anything that renders data, information, or perceived knowledge in any visual format through any multimedia distribution mechanism. It is designed to help management in their stewardship function, support management in their day-to-day operations and decision making. In 1880, machines were invented to help in the accounting system. Advancements on information technology also transformed accounting systems and its processes. There were many developments in the Accounting Information System (AIS). This is designed to help in the management and control of activities related to the firms' economic and financial area. Accounting system is essential for majority of the business entities. The advancements of technology have led in the creation a computerized accounting system which is commonly adopted by business entities and an Organizations at present. Thus, entities need to improve their systems in order to match their information needs for better decision making.

Information Technology is the area of managing technology and spans wide variety of areas that include but are not limited to things such as processes, computer software, information systems, computer hardware, programming languages, and data constructs. In short, anything that renders data, information or perceived knowledge in any visual format whatsoever, via any multimedia distribution mechanism, is considered part of the domain space known as Information Technology (IT). IT professionals perform a variety of functions (IT Disciplines/Competencies) that range from installing applications to designing complex computer networks and information databases. A few of the duties that IT professionals perform may include data management, networking, engineering computer hardware, database and software

design, as well as management and administration of entire systems. Information technology is starting to spread farther than the conventional personal computer and network technology, and more into integrations of other technologies such as the use of cell phones, televisions, automobiles, and more, which is increasing the demand for such jobs.

According to the open systems theory, an organization interacts with, adapts to and seeks to control its environment in order to survive (Fowler, 2009). In our day and age, we can see that environment pressures have an impact on the behavior of all organizations looking from the decision making, process points of views. All these pressures have created a much more competitive environment for the business world. Making high-quality and timely decisions depends in part on the quality of the data and the existence of on-line and real-time information. In very fast changing times organizations are actively looking for methods to improve the efficiency and profitability of their performance (Kloviene and Gimzauskiene, 2014). Information technologies are used to facilitate their business transactions (Rezaee et al., 2000), the process of decision making for organizations (Gatautis and Vitkauskaite, 2009; Melnikas, 2008; Zavadskas, et al, 2010). The information technology function is responsible for designing, implementing and maintaining many of controls over an organization's business processes (Cannon and Crowe, 2004; Abu-Musa, 2008; Consoli, 2010 a, b). It could be stated that IT has impact on all business processes and accounting is not an exception (Saban and Efeoglu, 2012). (Stambaugh ; Carpenite, 1992) counted in briefly the Information characteristics as follow: Provided on timely basis. Presented in an aesthetically appealing format. Relevant to the decisions at hand. Concise yet sufficient in scope to allow" what-if" analysis. flexible to interface with information from other functional units.

Characteristics of Accounting Information

There is also a several characteristics determine the qualities that make information valuable:

i. Costs-versus-benefits: sometimes information costs more to get additional information than the information is worth. Thus, cost-benefit considers provide an overall constraint on the amount of information a decision-maker will get.

ii. Understandability/Granularity/Aggregation: Many factors can contribute to the understandability of information, including user knowledge, skill, training, and motivation. In addition, information design choices such as its level of aggregation (or granularity) will affect its understandability, hence, its usefulness for controlling information integrity. For some purposes, highly aggregated information may be called for; whereas for other purposes, very detailed information may be required. Thus, appropriately tailored levels of granularity/aggregation can be enablers of information integrity. A proxy for the understandability of information is its conformity with user-specified requirements

iii. Reliability: the information must be reliable, you must be able to count on its being what its purpose to be (this is known, more formally, as representational faithfulness), and on its being reasonably free from error and bias (this is known, more formally, as neutrality). Additionally, for information to be reliable, it ought to be true if several different people (or systems) set out to derive the information from the data, they would all come to the same conclusion (this know, more formally, as verifiability)

iv. Currency/ Timeliness: It must be accepted that absolute completeness and accuracy are impossible or impractical to achieve. Information Currency is affected by real world changes over time (as well as by information processing delays) with a commensurate impact on information accuracy. Since time is continuous, completeness and accuracy must be understood in a context that defines acceptable limits for information currency, hence accuracy. For example, if certain information, such as cash receipts is only updated on a weekly basis to accounts receivable, then accounts receivable could be considered accurate if it was missing a day's worth of transactions. However, if information such as airline reservation transactions updates available seat inventory in real time, then seat inventory would be considered unacceptably inaccurate if a day's worth of transactions were omitted.

v. As presented here, processing timeliness and information currency are really aspects of information completeness, which in turn, determines the degree of accuracy that information possesses; however, because of their unique relationship to the dimension of time and the change that time engenders, it is useful to identify currency/ timeliness as separate attributes of information integrity

vi. Validity/Authorization: Representational faithfulness of information about intangible objects implies that the information is valid in ways other than correspondence with an original physical condition. The concept of validity means that information represents real conditions, rules or relationships rather than characteristics of physical objects. In a general context, conditions, rules or relationships are valid if what they purport is true. In a business context, conditions, business rules or relationships are established or approved by parties with the delegated authority to do so. Thus, transactions are valid if they were initiated and executed by personnel or systems that have been granted the authority to do so and if approvals are authentic and within the scope of the authority granted to the approver(s). For example, if the credit limit assigned to a customer reconciles to the company's rules and procedures used to set credit limits, the credit limit would be "valid." Thus, the concept of validity includes elements of both accuracy and authorization. A validation process may therefore require an investigation of an individual item, a relationship between one item and another item, or a relationship between an item and a business rule, policy or standard.

vii. Completeness: Accuracy by itself is insufficient to convey the full dimensionality of the requirements for representational faithfulness which requires completeness of information in both space and time. Thus, there is a fundamental trade-off between

completeness and accuracy because measurement and processing limitations of information processing systems will prevent 100% real-time completeness, especially for subject matter that changes frequently. This, in turn, prevents 100% accuracy. In other words, every discussion of accuracy is also a discussion of completeness, and vice versa.

viii. The amount of information is measured by the reduction of ignorance and uncertainty and not by the addition of knowledge.

Accounting System

Hartzell (2006) says that accounting system is a consistent way of organizing, recording, summarizing and reporting financial transactions. The minimum requirements for an accounting system include the following; It must provide financial information for management to make policy decisions, prepare budgets and grant proposals and provide other. Useful financial reports, also, similar transactions must receive consistent accounting treatment. An accounting system can also be defined as mechanism for gathering and communicating data for the ends of assisting and co-ordinating collective decision in view of the overall objective of a firm or an organization. Accounting system by definition is a financial information system which includes accounting terms, records instruction manuals flow charts programs, and reports to fit the particular needs of the business.

Accounting system is a set of records, procedures and equipment that routinely deals with the events affecting the financial performance and position of the organization. Accounting system is very important with its purpose and functions in organization - collection and recording of data and information regarding events that have an economic impact upon organizations and the maintenance, processing and communication of information to internal and external stakeholders (Christauskas and Martinkus, 2004; Jovarauskiene and Pilinkiene, 2009; Girdzijauskas, et al, 2008; Kundeliene, 2011), providing the financial information for decision making within the organization (Salehi, Rostami and Mogadam, 2010). Hence, accounting procedures have changed when most information exists only in electronic form and different methods were developed. Hyvönen (2003) determined that ERP systems increase the use of advanced managerial accounting techniques, such as ABC and Balanced Scorecard.

Saban and Efeoglu (2012) stated that the ERP system causes a change in managerial accounting practices, in terms of providing global information flow and standardization, and that conventional managerial accounting procedures are eliminated after ERP (Caglio, 2003; Jack and Kholeif, 2008; Yeh, Lee and Pai, 2012; Saban and Efeoglu, 2012). Information technology systems cause a change in issues of budgeting and reporting, which are among the managerial accounting applications, and enable the increasing use of advanced managerial accounting techniques (Yeh, Lee and Pai, 2012; Saban and Efeoglu, 2012). This aspects could be stated that information technology have changed the roles of accountants in business from information collection, preparation, analysis to the part in the functions of control, interpretation, assessment and decision-making (Yeh, Lee

and Pai, 2012; Saban and Efeoglu, 2012; Kloviene and Gimzauskiene, 2014). On the other hand, as information technologies are quickly developing, the accounting systems often do not support the business properly (Christauskas and Miseviciene, 2012) influencing the need to analyze accounting system compatibility with business environment.

Computerized Accounting Systems

The biggest impact of IT has made on accounting is the ability of companies or an Organizations to develop and use computerized systems to track and record financial transactions. Paper ledgers, manual spreadsheets and hand-written financial statements have all been translated into computer systems that can quickly present individual transactions into financial reports. Most of the popular accounting systems can also be tailored to specific industries or companies. This allows companies or an Organizations create individual reports quickly and easily for management decision making.

Advantages of Using Computerized Accounting System

i. Increased Functionality: Computerized accounting systems have also improved the functionality of accounting departments by increasing the timeliness of accounting information. By improving the timeliness of financial information, accountants can prepare reports and operations analyses that give management an accurate picture of current operations. The number of financial reports has also been improved by computerized systems; cash flow statements, departmental profit and loss, and market share reports are now more accessible with computerized systems.

ii. Improved Accuracy: Most computerized accounting systems have internal check and balance measures to ensure that all transactions and accounts are properly balanced before financial statements are prepared. Computerized systems will also not allow journal entries to be out of balance when posting, ensuring that individual transactions are properly recorded.

iii. Accuracy is also improved by limiting the number of accountants that have access to financial information. Less access by accountants ensures that financial information is adjusted only by qualified supervisors.

iv. Faster Processing: Computerized accounting systems allow accountants to process large amounts of financial information and process it quickly through the accounting system. Quicker processing times for individual transactions has also lessened the amount of time needed to close out each accounting period. Month- or year-end closing periods can be especially taxing on accounting departments, resulting in longer hours and higher labor expense. Shortening this time period aids companies in cost control, which increases overall company efficiency.

v. Better External Reporting: Reports issued to outside investors and stakeholders have been improved by computerized accounting systems. Improved reporting allows investors to determine if a company is a good investment for growth opportunities and

has the potential to be a high-value company. Companies can utilize these investors for equity financing, which they use for expanding

vi. Competitive Advantage: Utilization of information technology resources allows companies to maintain a competitive advantage over their rivals. Information technology can be used to make new and improved products and distance them from the existing market. Costs can be reduced adopting information technology solutions in business. This can increase productivity and reduce the need for employee overhead. Businesses can also build-in information technology to their products that makes it difficult for customers to switch platforms or products.

vii. Economic Efficiencies: Information technology resources can significantly reduce accounting costs. Redundant tasks can be centralized in one location through the use of information technology infrastructure. Economic efficiencies can be realized by migrating high-cost functions into an online environment. Companies can also offer email support for customers that may have a lower cost than a live customer support call. Cost savings could also be found through outsourcing opportunities, remote work options and lower-cost communication options.

Disadvantages of Computerized Accounting System

1. **Power Failure:**
2. **Computer Viruses:**
3. **Hackers:** are the inherent problems of using computerized systems;
4. **Garbage in Garbage out:** Once data been input into the system, automatically the output are obtained hence the data being input needs to be validated for accuracy and completeness, we should not forget concept of GIGO (Garbage In(Input) Garbage out (Output) and
5. **False Programmed:** Accounting system not properly set up to meet the requirement of the business due to badly programmed or inappropriate software or hardware or personnel problems can caused more havoc
6. **Fraudsters:** Danger of computer fraud if proper level of control and security whether internal and external are not properly been instituted.
7. **Scammers;**
8. **Internet Fraudsters:**

Accounting Software used in Business

i. Income Tax. Because tax laws are frequently changing, it is becoming exceedingly difficult to deal with them. Therefore, manual tax preparation is becoming more and more difficult and time consuming. Fortunately, tax preparation software is currently available for companies. Therefore, instead of processing tax manually, companies can use computer software to perform the same functions. As a result, even complex calculations can be performed via computers in a short period of time.

ii. Audit. Information technology has also computerized the auditing profession. If auditors perform auditing functions manually, it takes time. However, audit software packages are currently available for auditors. For example, trial balance software enables auditors to input the working trial balance, handle all types of adjusting entries, and automatically compute the adjusted trial balance.

iii. Word Processing. Word processing is computer-assisted creation, editing, correcting, manipulation, storage, and printing of textual data (Romney et al., 1997: 246). Accountants use word processing software to prepare reports, billings, memos, and financial statements.

iv. Graphics Software. Graphics can be prepared using graphics software. Graphics can be printed on paper or displayed on slides, transparencies, and photos. Many auditors and managerial accountants use the graphics software to graph the data in financial statements and reports.

v. Image Processing. Creating, storing, and updating paper forms of documents take time. In addition, it is very costly to process and store documents. Fortunately, these costs can be eliminated with the help of document imaging systems. Image processing captures electronic image of data so that it can be stored and shared. With the help of document imaging, accountants can scan paper documents into the computer and process all of the files electronically. Companies that use document imaging are moving toward paperless offices.

vi. Electronic Data Interchange (EDI). Electronic data interchange enables companies to communicate with each other electronically. Therefore, EDI enables companies to exchange documents electronically with each other. For example, computerized network enables purchaser and the supplier to exchange purchase orders and invoices electronically in the form of images.

vii. Electronic Funds Transfer (EFT). Companies can now connect to banks through EFT. This system enables companies to make payment and collection electronically. In this case, when company wants to pay for accounts payable to a supplier, it can do it via EFT. Furthermore, whenever company makes sales, transactions are immediately charged to consumer's bank account and simultaneously credited to company's account. In addition, all relevant accounts such as accounts receivable and cash are updated immediately by the computerized system. The use of the computerized systems mentioned above has led to the automation of accounting information system. Accounting information systems equipped with these kinds of technologically advanced tools can now perform accounting functions more effectively and reduce costs.

Conclusion

Information technology advancements have greatly helped the accounting systems of business entities. Because of today's computerized accounting information systems, business performance seems to improve. Many transaction processes were simplified thus creating efficient operations. The affordability of computer technology for small business entities creates great opportunities for these entities to improve their business. Information technology advancements made effective and efficient information flow that enhances managerial decision-making, thereby increasing the firm's ability to achieve corporate and business strategy objectives. This in turn, may increase the prospects of the firm's survival. Information technology applied in accounting is not perfect. Sometimes we must consider the fact that they are just piece of technology. With regards to the accounting information system of a business, these systems greatly help in the accounting processes. However, we must consider the possibility that the system might be ineffective sometimes, same with some accounting software. Business entities much choose compatible systems and software for them to be effective. In these advanced days in information technology, computers have improved the accounting processes but computers can't replace the role of man in the accounting systems

Recommendations

From the findings of this study the following recommendations are therefore made to enhance the performance by these selected banks in their banking operations.

- a) Business entities should take advantage of the excellent benefits derivable from the adoption of well-designed computerized accounting system.
- b) Due to the dynamic nature of computerized Accounting system, and in line with the present global computer trends of events which is now widespread and mostly known as "Computer Age".

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