

Accounting Information System and Its Role on Business Performance:

The copper belt University DDEOL Department of Accounting, School of Business,
Email:temboBAC@gmail.com

RESEACH:

Abstract.

The objective of this assignment is to investigate the influence use of Accounting Information System

(AIS) performance in Zambian businesses. The study discusses and explores the effects of the use of AIS on the performance of SMEs.

The result of this study is expected to help the owners and manager of Businesses to understand the importance of the use of AIS to achieve performance. The use of AIS is influenced by several characteristics enjoyed by the accounting information such as: reliability, relevance, and timeliness that effect on firm's performance.

The result of AIS study and modern literature shows that, it has been confirmed that implementing a proper Accounting Information System is an enabler to competitive advantage and characteristics enjoyed by the accounting information such as: reliability, relevance, and timeliness have significant effects on the use of AIS and Business performance. Prior researches have shown that is crucial for SMEs to use AIS to ensure business continuity and survival in the increasingly competitive environment and to enhance their business operations capability and efficiency.

The study is one of few that shed light on how the use of AIS affects the performance of Businesses. In this regard, dimensions of using AIS are important for improve the performance of Businesses.

The Accounting Information System (AIS) has been an important concern to the business community as it is not only helps firms recognize the potential benefits from investments in IT but also improves business performance (Abu-Shanab et al, 2015). However, it is known that no single measure of performance could fully account for all aspects of firm performance.

Moreover, although firm performance has been assessed using a diversity of measures, there is no universal guideline regarding the appropriate choice.

Researchers measure performance objectively and/or subjectively, where objective measurements depend upon profit and financial data, and subjective measurements rely on managerial assessments. On the other hand, some researchers used both methods to ascertain firm performance, which enhances the reliability of their conclusions.

Initially, the Financial

Reporting Standards (FRS's) and Statements of Standard Practices (SSAP's) dealt with the accounting standards, and offered guidelines that covered a considerable variety of accounting issues. For instance, public companies are

required to disclose in their financial statements several figures such as the chairman's statement; directors' report; profit and loss account; balance sheet; cash flow statement; notes to the

accounts; and auditors' report. In addition, analysts use a well-known technique in analyzing the figures taken from company financial statement, ratio analysis.

The main purposes of the analysis of ratios can be summarized as ascertaining the performance of the company, determining its financial strength, and using them for comparative purposes. Consequently, by applying ratio analysis, researchers use profitability (accounting) ratios and/or financial (market) ratios.

Keywords: accounting information system (AIS), performance of Businesses in Zambia.

Background

Both large and Small and Medium Enterprises (SMEs) are responsible for most net job creation and they make an important contribution to productivity and economic growth. They play a significant role in all economies and are the key drivers of innovation and growth.

According to the Organization for Economic Cooperation and Development SMEs are now recognized worldwide to be a key source of dynamism, innovation and flexibility, SMEs are very important to the social-economic development of Zambia

SMEs are expected to be an important vehicle to address the challenges of job creation, sustainable economic growth, equitable distribution of income and the overall stimulation of economic development in Zambia. But despite their significance, Business are faced with the threat of failure with past statistics indicating that three out five fail within the first few months (Bowen, Morara, & Mureithi, 2009; . Because the availability of reliable data on business is in general difficult, a private survey is was needed to get the data on the use of accounting information system (AIS).

Zambia is the one of the less developed country, witnessed many changes during the last decades, such as, the chaos of political and economic transformations. These events changed the basic features of sector of Businesses and the instability and constants changes economically have become a dominant feature of the sector of businesses in the Zambia's environment as reflected in the use of AIS which affected the performance of firms.

We find that the use of AIS is a more significant determinant of company performance in Zambia. They are at the core of improving business performance and behavior by Add Value to an Organization through.

- Improving the quality and reducing the costs of products or services.
- . Improving efficiency. A well-designed AIS can make operations more efficient by providing more timely information.
- Sharing knowledge. A Well-designed AIS can make it easier to share knowledge and expertise, perhaps thereby improving operations and even providing a competitive advantage.
- Improving the efficiency and effectiveness of its supply chain.
- Improving the internal control structure
- Improving decision making

LITERATURE REVIEW

The review of SMEs and other businesses literature reveals limited research has attempted to investigate the effect of the use of AIS in Businesses, particularly in the Zambian context. This study examined the use of AIS effect on the performance of Corporates and SMEs. Therefore this study is aimed, based on previous literature, at measuring the relationship between the use of AIS by the businesses and Performance these Enterprises.

This study provides value added in accounting literature given the scarcity of works dealing with the relationship between the application and the use of AIS and performance indicators in both the corporate and SMEs in Zambia. It is common knowledge that the main objective of a business is to maximize profit either in terms of improve performance and increases in business productivity or by achieving rapid expansion in market shares domination. To achieve this goal, businesses need to be responsive to the changes in the environments, in particular to the use of AIS. Nowadays, using AIS is a must in many businesses. It is difficult to gain competitive advantage and survive without some adoption or implementation of this advancement in technological products. Studies have shown that the most widely use of AIS, specifically in financial reporting aspects (Marriott & Marriott, 2000; Riemenschneider & Mykytyn Jr., 2000; Ismail, 2007).

In the previous literature also the use of AIS can play a dominant role in assisting SMEs to performance small and medium enterprises better and stronger. Where, that many researchers (Amidu *et al.*, 2011; Ismail, 2007; Grande *et al.*, 2011) are of the opinion that the role of using AIS is important to enable Businesses to develop performance there (Ali *et al.*, 2012; Lallo & Selamat, 2013).

To achieve this goal, Businesses need to be responsive to the changes in the environments, in particular to the information technology revolution. Nowadays, information technology is a must in many business sectors. It is difficult to gain competitive advantage and survive without some adoption or implementation of this advancement in technological products. Studies have shown that the most widely use of information system is to use AIS, specifically in financial reporting aspects therefore, this study examines the relationship between use accounting information system and the performance of Businesses.

Previous studies show that large companies were more likely to use AIS than SMEs, although most of the literature was not specific to SMEs.

Large companies are more likely to perform well and are more likely to use accounting information system than SMEs because companies with greater sales and higher revenue from using AIS are better able to cover the costs.

These literatures offer scant evidence of the relationship between these AISs and performance measures; though it is important to highlight the previous studies which discovered a positive association between using AIS and firms and business's performance.

(AIS) LITERATURE REVIEW

As it is known, in the business world there is an increasing dependency on Information technology (IT). This is because of the need to improve business efficiency revealed that AIS is interdisciplinary in nature and seems to integrate the fields of accounting and Information Systems (IS). This opinion is supported by Lallo and Selamat (2013, the authors explained that AISs have been perceived as a means of providing financial information to organization (Mia, 1993). There has been considerable evidence that within SMEs financial accounting has remained the principle source of information for managers. These studies have also found out that Businesses are still having ineffective information management, poor system control, and most decision making is on ad hoc basis despite having used AIS. Previous literature above reason, that this situation could be attributed to the initial objectives of Information Technology (IT) adoption.

The accounting system original role of replacing manual accounting process has hindered further usage and exploration on the system benefits.

Marriott and Marriott (2000) further concluded that financial awareness among managers varies considerably and the use of computers for the preparation of management accounting information is not at its full potential. Research in information systems is well aware that the use of AIS does not directly affect Business performance (Ismail & King, 2005; Saira *et al.*, 2010). The AIS be used and exploited to achieve its intended objectives. Therefore, before moving towards adopting more sophisticated and advanced AIS; it is important to determine businesses current usage of existing accounting information system (In this context, underscoring the strategic importance of using AIS, noted that the use of accounting information could be linked to the success or failure of a small or medium enterprise. In order to survive, Business owners and managers need updated, accurate and timely accounting information Accounting systems are responsible for analyzing and monitoring the financial condition of companies, preparation of documents necessary for tax purposes, providing information to support the many other organizational functions such as production, marketing, human resource management, and strategic planning. Without such a system it will be very difficult for SMEs to determine performance, identify customer and supplier account balances and forecast future performance of the organization using standardized guidelines, the transactions are recorded, summarized, and presented in a financial report or financial statement such as an income statement or a balance sheet. Here, using AISs is viewed as a system that helps management in planning and controlling processes by providing relevant and reliable information for decision making (Gordon & Miller, 1976). It suggests that AIS's functions are not solely for the purpose of producing financial reports. Its role goes beyond this traditional perspective. Generally literature on accounting in the AIS shows that

several scholars have investigated the adoption of the system among large companies only. Very little knowledge is known about the evolution of computing in Firms (Grande *et al.*, 2011). .

Research and methodology

Key Factors: use of (EDI), (COSO) (ERP) AND (COBIT)i.e.

In the study of electronic data interchange (EDI), Khazanchi & Sutton (2001) give evidence of the requirement for systems assurance, illustrating that numerous companies enforcing these systems do not use them to full benefit. This shows that entities authorizing EDI for their clients or customers should require assurance of suitable functioning. Results of these studies recommend a demand for trust services. Consequently, it follows that there should be a positive effect on the business of clients that meet approved trust services standards. Moreover, a study from et al. (1998) argues that expression of agreement on measurement criteria for assurance services among providers and users will enable a more effective and efficient production of those services.

Sys Trust is one of the models to update Internal Control Systems (ICS) of AIS through framing the technological variables which affect designing AIS. Due to such nature, much of the practical studies have been implemented using the principles and criteria of Sys Trust to examine quality and performance of AIS.

The term ICS has been used by COSO (1992) to refer to the risks associated with ineffectiveness management of public companies, both large and small. Integrated framework of COSO has long served as a blueprint for establishing internal controls that promote efficiency, minimize risks, and help check the reliability of financial statements and comply with laws and regulations.

According to COSO's study, ICS is no longer an accounting concept. COSO's report has outlined
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fundamental principles associated with the five key components of ICS: (i) control environment, (ii) risk assessment, (iii) control activities, (iv) information and communication, and (v) monitoring. ISACF (2001) considers the control objectives associated with use of IT.

The study is widely known as COBIT. COBIT consists of three control groups: business objectives, IT resources, and IT-based process. The key feature of COBIT is coming from the fact that it has developed 36 standards of control related to security of IT-based AIS. The impact of IT formed an accounting process on the operational variables of cost and productivity, and profitability has been addressed by Casolaro & Gobbi (2004).

The study was conducted on more than 600 banks belonging to the Italian banking industry. The study concludes with the facts that intensive use of IT-based AIS has reasonable impact on: (i)

reduction of banking services cost, (ii) expansion of banking services package, and (iii) increasing banking profit.

Another study was conducted by Raupeliene & Stabingis (2003) has considered the effectiveness of IT based AIS.

The study has developed a quantitative model based on set of technological, economics, and social parameters.

Boritz (2005) conducts an extensive review of the literature to identify the key attributes of information integrity and related issues. He brought two focus groups of experienced practitioners to discuss the documented findings extracted from the literature review through questionnaire examining the core concepts of information integrity and its elements. Boritz (2005) considers information security as one of the core attributes for information integrity. This security should cover the following areas: Physical access controls and Logical access controls.

The results indicate that the security has a lower impairment severity score than other severe practical aspects, such as availability and verifiability. Boritz's such findings refer to the effective use of security controls in the organizations represented. In his study, Coe (2005) focuses on the fulfillment of Sarbanes-Oxley act 2002 that requires public companies to report about the effectiveness of their internal control systems. Coe. In this study, it is explained that the American companies are using COBIT for Sarbanes-Oxley act 2002 compliance, and this is because its objectives have been mapped to COSO in a publication entitled IT Control Objectives for Sarbanes-Oxley.

Data Analysis

COBIT also has been mapped to popular enterprise resource planning (ERP) systems, like SAP, Oracle and PeopleSoft.

This mapping and related guidance provides COBIT with framework references and methodologies for auditing and testing the major ERP systems. But it is decided later to use Sys Trust service to ensure the company's systems carry-out business processes reliably. Herein, Coe establishes five-step processes showing how the CPAs can use the trust service framework to evaluate a company's IT controls when the entity primarily uses the COSO approach. These steps are: (i) Use COSO framework to identify the risks in each business cycle and the controls that mitigate them, (ii). Gather initial IT information, (iii) Identify all information systems that relate to financial reporting. (iv) Be used to trust services framework to create one overall IT matrix, (v) Assess the controls identified in the matrixes created above. Martin (2005) mentions the same steps in his study, in which he tries to explain how information system auditor can use the AICPA/CICA trust services framework to evaluate internal controls, particularly controls over information technology. The participants in the experiment were 481 middle and upper-level managers from a wide range of functional areas.

The study concludes that auditor-provided assurances on information systems availability security, integrity and maintainability will show significant key effects with respect to the probability of the participant entering into a contractual agreement with the ASP organization. In addition, the comfort level of the participant with the reliability of the ASP organization's ERP system will increase. In the same perspective, Mauldinet al. (2006) investigate the possible demand for third-party assurance reports in business-to-business electronic commerce (B2B e-commerce) by observing the purchase decisions of 95 professionals' to advise using a B2B exchange. The experiment uses the 2×2 between subjects design, and varies the assurance scope (system related assurance vs. data related assurance) and assurance timing (continuous assurance vs. static assurance) with another control condition of no assurance. The results of the study show that there is more probability of purchasing professionals advising using the exchange when general assurance over the reliability of the exchange's system exists, than when specific assurance over the reliability of transaction information exists. There is also a greater chance of purchasing professionals advising using the exchange when the assurance report is continuous than when it is static, issued at a given time. However, the results also suggest that those participating are less probable to recommend using the exchange when specific information assurance or static assurance exists than when assurance does not exist at all. Also, Meharia(2011) aims to study the effects of assurance services and the trust in the mobile payment system on how users' use the system. To demonstrate this matter, the study depends on the Technology Acceptance Model (TAM). The study finds that the users' intention to use their attitude towards the system determines their real use. Their attitude towards the system is decided by the apparent usefulness of the system and the

simplicity of use. However, the study adds that the assurance on the security, availability, confidentiality, privacy, and process integrity of the system will have a positive influence on the users' attitude towards the system, in combination with the apparent usefulness and simplicity of use. Also, from a security perspective, Siponen & Oinas-Kukkonen (2007) reconcile prior security

research literature and emphasize the distinct importance of accessibility and availability as it relates to communication issues, like user authentication and appropriate maintenance of data retention. Strong et al. (1997) also segregate and highlight the importance of accessibility as a determinant of data quality.

In particular, they emphasize the importance of access security and timely availability to data. Likewise, Nelson et al. (2005) argue that accessibility represents a system attribute that is distinct but similar in importance to the system's ability to produce reliable data, although they argue that this impact of accessibility is second in order of influence to the system's processing reliability. Consequently, it is apparent that system assurance has a positive influence on system users, their reliance and, therefore, on their decisions, particularly when this assurance is provided constantly, which is more suitable according to the present changing environment. In reviewing the literature, it can be seen that Certified Public Accountants (CPAs) can provide assurance on RTA Information Systems.

CPAs are accepted as independent parties that provide assurance concerning the accuracy and fairness of financial information. Also, CPAs are well-informed about the subject matter to be assured and the assurance matters, recognized for their independence, objectivity and reliability (Boritz & Hunton, 2002), and acquire advanced technical competencies (Burton, et al., 2012). Boritz & Hunton (2002) aim to assess the extent to which auditor-provided systems reliability assurance affects potential service recipients' (i) likelihood of recommending that their company should enter into a contractual agreement with the service provider, and (ii) comfort level with the reliability of the service provider's information systems.

Based on an experiment on 481 middle- and upper-level managers from a broad spectrum of functional areas participating in the study, the conclusion is that auditor-provided assurances on information systems availability security, integrity and maintainability will exhibit significant main effects with respect to the participants' likelihood of entering into a contractual agreement with the ASP firm and the participants' comfort level with the reliability of the ASP firm's ERP system will increase. Similarly, Greenberg et al. (2012) attempt to investigate the impact of Sys Trust criteria (availability, integrity and security) on users' intention to use online accounting systems and their reliability. Based on the TAM, the study posits that the intention to adopt online systems depend on the perceived usefulness of the system, perceived ease of use, trust in system reliability, and trust in the internet.

The study finds that users' intention to adopt the online accounting system is higher when users' trust in system reliability

and trust in the internet are higher. The results of the study suggest that the reliability of a system, as measured by Sys Trust criteria, is relevant to the decisions related to the intention to adopt online accounting systems. Furthermore, it is predicted that accounting organizations will benefit from their long experience of financial audits and will probably surpass other types of assurance providers in the formal application of non-financial assurance services (Perego, 2009). Additionally, when providing financial matters, CPAs should follow strict and comprehensive ethical and professional standards (Boritz & Hunton, 2002). For this reason, the American Institute of Certified Public Accountants (AICPA) considers assurance service on electronic systems a logical and natural extension to the already present services that the auditor provides. Experimental work indicates that there would be demand for both and Sys Trust (Boritz & Hunton, 2002) in the marketplace.

Questions and risks in Sys Trust engagements, and most auditors are leery about delving into the ill-defined arena of systems reliability assurance. Only limited research to date has looked at ways in which to improve and deliver systems reliability assurance. Havelka et al. (1998) conduct a series of focus groups with systems development teams in order to establish criteria for assessing the quality of the information. Arnold et al. (2000) explore the market demand for graded reporting of systems quality versus use of a traditional auditor's binary reporting model.

These studies represent the first incremental steps in understanding systems reliability assurance. Given the major role that IT systems play, particularly in enterprise systems environments, the profession must rapidly advance its ability to assess systems quality and academic researchers need to step forward in helping answer the difficult questions that to date present barriers to widespread systems reliability assurance efforts. After reviewing the previous studies, in this specific area of research, relating to reliability of CAIS control systems, it can be observed that there are not enough studies available, and this could be due to the fact that this area of research is reasonably new. In addition, many of the studies in this subject are administered on a small level and connected with combined studies from the fields of business management, computer science, and at times engineering. They are often in the form of reports or descriptive studies, and rarely experimental.

To summarize, there is a lack of academic literature on the issues of trust services and its influence on the quality of financial. It should also be noted that some of the investigations are conducted in isolation, without benefit from the experience of findings from other studies.

Recommendation

this study investigates the impact of using AIS on performance of businesses both large and small and medium enterprises in Zambia.

The conceptual framework of this study below shows the relationship between the variables under study. The independent variable is the use of AIS and the dependent variable is the performance of SMEs. The model describes the effective mechanism of the use of AIS on performance of SMEs. It shows how the dimensions of the use of AIS impact the aspects of performance SMEs. Based on their underlying rationale,

Many researches stress the importance of the use of AIS as a strategy to improve performance of SMEs and sustainable competitive advantage for Business the conceptual model proposes how the use of AIS impacts on the performance of SMEs. In order to exam the proposed relationships between the use of AIS and the performance of SMEs. Therefore, the hypothesis as follows:

The performance of businesses in Zambia will vary with the choice of accounting information system (AIS) adopted.

The AIS and corporate strategy competitive advantage inclusively businesses have

- Unlimited opportunities to invest in technology.
- Limited resources to invest in technology.

Consequently, they must identify the improvements likely to yield the highest return. This decision requires an understanding of the entity's overall business strategy. Michael Porter suggests that there are two basic business strategies companies can follow– Unlimited opportunities to invest in technology and Limited resources to invest in technology.

E Internet may impede access-based strategic positions. The AIS should help a company adopt and maintain its strategic position, Requires that data be collected about each activity.

The AIS requires the collection and integration of both financial and nonfinancial data. The authors believe: Accounting and information systems should be closely integrated.

The AIS should be the primary ormination system to provide users with information they need to perform their jobs.

Appendix

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