

# Effects of Computerized Accounting Systems on Financial Performance

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## Abstract:

Many organizations have wholeheartedly embraced computerized accounting systems in order to expand their corporate operations. In recent years, service businesses, particularly the banking industry, have experienced considerable development as a result of the use of computerized accounting systems. This study assesses the linkage between the financial performance of Kenyan businesses and the setting for computerized accounting. A few of the themes that have been taken into account are data controls, detective controls, preventive controls, and corrective controls. In contrast to clerks using manual procedures, the study found that a computerized accounting system (CAS) will not issue invoices incorrectly, hence eliminating errors. Business organizations are becoming more and more competitive in the market as a result of the implementation of CAS.

**Keywords:** Computerized Accounting System, Financial Performance, Digital literacy, System controls

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## 1. Introduction

Many organizations have used computerized accounting systems widely to compose the operations of their businesses. Service industries have experienced a tremendous growth as a result of using computerized accounting systems in the recent past; an example is the banking industry (Imeokparia, 2013). The usage and availability of the internet has been an added advantage to the users of computerized accounting systems since a virtual environment is created where accounting operations can be conducted remotely or even globally (Osmond, 2017).

Manual accounting has been the most common accounting method in the recent past. And for this purpose, organizations had to employ either full-time or part-time accountants. It basically involved manual recording of transactions, generating ledgers and books of accounts, preparation of financial statements, all on a paper (Bashorun, Omopupa, & Dahiru, 2020). The modern technology we use today has brought in the use of computers in conducting various

tasks. Technology involves applying science in collecting, recording and processing of information in business, and then communicates to the intended users by use of electronic media. For this purpose, the tool mostly used is the computer for processing transactions and managing of business data. The computer plays a major role in advancement of various organizations

## **2. Computerized accounting systems environment**

This section entails the review of literature related to computerized accounting systems. The discussion is aimed at recognizing, assessing, and presenting relevant information which is related to computerized accounting systems and financial performance.

### **Data Management**

In today's accounting field, one of the major factors pushing the necessity of adopting CAS is the large amount of data and transactions in most organizations and institutions. The data need to be stored and managed in an organized manner for efficiency of operations and also for reference purposes. Data management is a critical function in any institution. It involves the collection of information, analyzing it, storing and organizing it in a way it can be accessed easily when needed by the right individuals, (Huber, 2009). Managing your data effectively can also positively contribute towards operational decision making and strategic planning by executive officers and other senior managers. Data management being a crucial function, there's high levels of accuracy required, which brings in the need of using computer systems to aid in storing the large amount of data accurately and also make them accessible when needed.

The modern technology today has enabled the computers to have a continuous improvement in their processing speed and large storage capacities, (Korpela, Montealegre, & Poulymenakou, 2003). This aspect aids in the improvement of data management function which in the long run can influence the performance of an institution or any other firm. Most Computerized Accounting Systems (CAS) are multi-user systems. These systems use databases that which keeps consolidated sets of data from the institution's systems. After setting up databases, performance monitoring must always be done and also security provided, so as to make it not available to anyone, but intended users. Retrieval of information from databases is always done by user friendly programmers, as well as addition of new information. This forms an integral part which enhances efficiency in management of accounting data in the institutions.

### **Data control**

IT security experts set up and use antispyware, firewalls, intrusion detection systems, encryptions, access control lists, network scanners, and penetration testing tools as part of an IT security defensive strategy; these are particular duties based on user expectations and usability knowledge (Bruce, 2019). Data control in the field of accounting mainly involves the procedures and methodology put in place by a firm or organization to enhance the validity and accuracy of financial information they prepare and provide. These control methods do not have to necessarily comply with laws and regulations, but are developed to suit in aiding the organization to operate smoothly.

Every organization or institutions always have different operations and challenges, thus different accounting controls implemented. In the scope of accounting controls, three areas are mainly covered namely; detective controls, preventive controls and corrective controls.

### **Detective controls**

Serious fraud problems have been brought to public attention at some Kenyan businesses. The companies who were in the spotlight because of corporate scandals might have done so because they neglected to employ the supposedly efficient procedures for managing fraud risk. The fact that fraud is quite seldom in Kenyan businesses suggests that they are using the best fraud preventive, detective, and corrective procedures available (Mwangi & Ndegwa, 2020). The auditor can categorize, sort, summarize, merge, and match data using CAATs, as well as filter, define, and produce equations, as well as detect gaps, carry out statistical studies, seek peer records, and find peer records (Kamau, 2022). "Detective control" is a type of internal control which is meant to find problems within an institution after their occurrence. They seek out any practices that are currently ongoing that do not tally with the policies and procedures of the organization. An example of this type of control is by trying to detect any mistakes or errors made by employees in the system or a mistake in the accounting practices. It can also include internal audits, which can be conducted by other members of staff within the organization.

### **Preventive controls**

This, in simple terms, means the controls that are put in place to prevent a loss or an error from taking place. They are implemented by organizations to prevent any incorrect practices that would occur. In the case where a severe loss has been experienced, this type of control is usually employed to reduce the chances of any loss ever occurring. They can also include the imposition of policies and procedures that all employees must follow (Ongore & Kusa, 2013). A practical example where this idea can be used is segregation of duties, where different personnel or employees have different tasks that do not overlap in reporting or auditing areas.

### **Corrective controls**

Corrective controls assist in minimizing the impact of threats, identifying the root of issues, and fixing errors that result from issues. Detective controls identify issues, while corrective controls change the processing system to reduce future occurrences of the issues (Mumba & Wekes, 2020). Corrective controls are majorly meant to correct errors or any irregularities that has been identified. They are implemented to fix any issue which could have been found through detective controls. This could include recommending on any issue which has been detected in an organization's books of accounts after conducting an audit.

## **3. Digital literacy**

In the recent past, the role of accountants in business has evolved. This is due to the increasing transformation from the use of manual accounting systems to the use of computerized accounting systems. The extensive use of computers in business operations has resulted to the change in the skills required to conduct accounting duties.

IT competencies are considered crucial for digital accountants to conduct their tasks. It is essential to identify the roles of a modern accountant today. It includes definition of the roles

in depth, depending on the need and operations of the firm or institution. Defining the role of a digital accountant in any organization is crucial in that it sets the framework within which a digital accountant in an organization has to operate, that is the scope of the work and this will in the end affect IT tools and intended to be used.

A fundamental understanding of how computers are operated is crucial for modern accountant personnel, as far as digital literacy is concerned. This assists in the gathering of relevant information, production of written documents and also resolving of issues arising on day-to-day basis while using various forms of technology, (Amidu, Effah, & Abor, 2011). There are a number of programs which a modern accountant should be well conversant with. The first example is the use of the spreadsheet software like Microsoft Excel. It's of significance in that it is capable of using complex formulae and making compilation spreadsheet much easier. Another one is the accounting software such as QuickBooks and ERP. Accounting personnel can print cheques, produce customer's invoice or enter invoices received from suppliers into the system through these software. They can also contain in them modules for monitoring and preparing payroll, managing of fixed assets and inventories. They also allow easy production an accessibility of financial statements. Digital accounting personnel need to possess the working knowledge and experience to use these software applications. Use of digital credit which involves use of mobile telephone devices and other online platforms to secure has been on a steady rising trend in Kenya since the year 2012 (Kamau, 2021). This is an indication of improving digital literacy.

Basic knowledge of Generally Accepted Accounting Principles (GAAP) is also a fundamental requirement for any accounting personnel. This is because the law in accounting field requires that institutions and organizations to provide financial statements and reports that comply with the GAAP standards. Another factor to consider as far as digital literacy is concerned in CAS is the flexibility, adaptability or willingness of the accounting staff to the changes in technology. This means keeping pace with evolving technologies in the accounting field. This is because the accounting model applied today is likely to be different from the business models that will be used in the next decade or five years to come. It is therefore necessary to take time to invest and monitor relevant technological advancements in the journey of a digital accountant.

#### **4. Financial performance**

To create a firms value, one need to design and implement financial management. Financial management's main objective is to balance between liquidity, solvency and profitability, (Bouba, 2011). Financial performance is an important aspect to any organization, firm or institution. It affects directly the life and survival of any profit making organization. When there's better performance, that's an indication of how effective the management works and makes good use of the organization's resources, (Omondi & Muturi, 2013).

In this research, financial performance of an organization is defined as the measurement of how effectively an organization can use its assets to generate revenue from its primary mode of business, (Finke, Guo, & Huston, 2021). Financial performance of an organization can be measured by monitoring its profit accumulated, the value of shares and its growth index. Other financial analysts monitor return on investment, net income as a percentage of sales, and costs of poor quality production as a percentage of sales, as measures of financial performance. For the case of this research, we are going to examine financial performance of an institution

through parameters like gross profit margin, return on investment and earnings before interest and tax (EBIT).

## 5. Literature Review

There are a number of literature studies which support CAS comprising of both local and international reviews. However, these studies have addressed different aspects in different contexts. Krishna (2015) conducted a study about the effects of IT on banking Industry in India. She studied the various technological developments within the banking sector in India, which have been as a result of ICT. These forms included telephone banking, ATMs and mobile banking. She concluded that ICT results into a lower cost. She further reported that the effect on profitability cannot be constantly conclusive since there is a possibility of impacts that arises due to demand for the skilled labor and competition faced in the sector.

Kenneth, Rebecca, and Eunice, (2012) also conducted a study on the factors affecting the budgeting process among SMEs. In their study which involved a sample of 120 firms, they derived that CAS is one of the factors that affect budgeting process. They recommended that IT should be considered in the budgeting process due to its significance. According to Ismail (2009) some managers are a position to use IT strategically. He suggested that use of IT has expanded greatly towards management accounting field. He indicated that information systems have an effect on financial performance of a firm, and there exists a positive relationship concerning the same. Another research was done by Nzomo (2013) on the impact of AIS on organization effectiveness found out that AIS is an important mechanism for an organization's effective management, decision-making and controlling activities.

In the study to identify the effects of CAS on audit risk management in public enterprises by Otieno and Oima (2013), the findings reflected that 36% of the enterprises reported that they have already employed CAS, while the other 24% were still in the process of adopting the systems. More than 40 % of the targeted enterprises did not have computerized audit implementation plan. The findings of this research indicated that there is a positive relationship CAS which was employed and audit risk management policy in the enterprises. This study however did not consider the impact that CAS might have on financial performance of the enterprises. The linkages between computerized accounting syatem and financial performance is illustrated using figure 1 below.

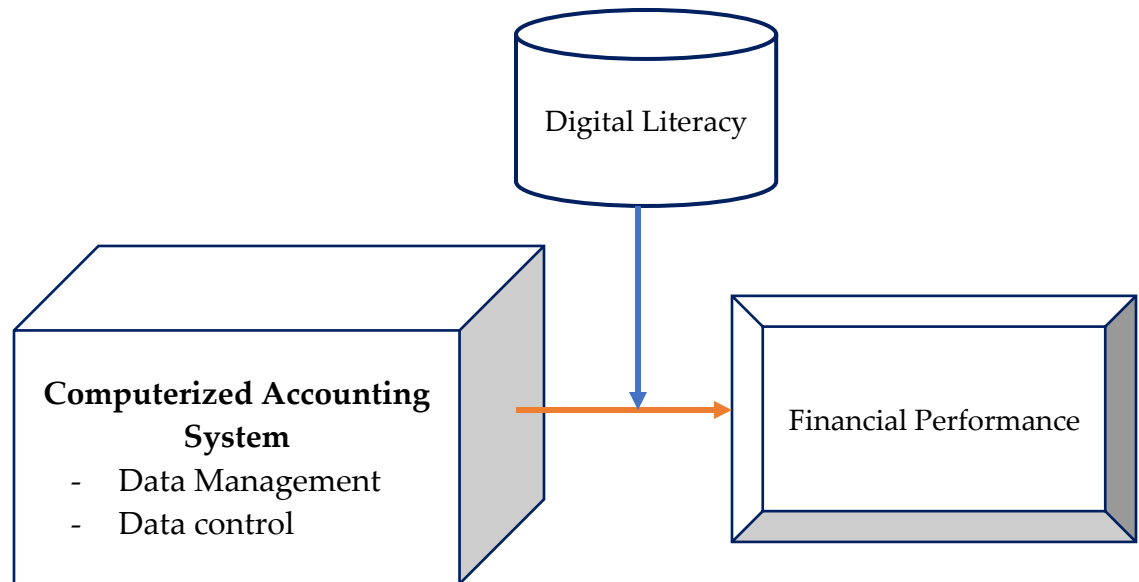


Figure 1: The linkages

## 5. Conclusion

It is blatantly apparent that CAS helped to ease some internal control concerns that emerged as a result of the use of manual accounting methods. Compared to clerks using manual procedures, a CAS will not issue invoices improperly, minimizing errors. As a result of CAS adoption, business organizations are becoming more and more competitive in the market. As far as financial performance is concerned, there is a need to use an advanced accounting system due to the expansion of activities and diversification in the commercial sector. The adoption of CAS is accelerated by digital literacy. CAS increases operational efficiency, which boosts financial performance.

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