



Assessing the effect of use of computerized accounting systems on organizational performance: A focus on selected (NGOs) on the Copperbelt of Zambia

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Abstract

The purpose of this study is to assess the effect of the use of computerized accounting systems on organizational performance and the effect it has on the performance of Non-governmental organization on the Copperbelt Province of Zambia. The study uses a simple random sampling technique and employed a mixed method approach, quantitative and qualitative research design methodologies. This study employed a correlation analysis and a combination of data collection methods such as interviews, direct observation and questionnaires to gather the needed data to ascertain the relationship between variables. The findings showed 80% adoption rate; also confirmed that the use of computerized accounting systems in NGOs contributed positively to financial reporting practices that are required by funders. The results from correlation tests indicated that; there is a highly significant positive relationship between computerized accounting system (X) and performance (Y) in NGO's with ($r = 0.730$, $p = 0.022$). It was concluded that, the use of computerized accounting system in these non-governmental organizations simplified a lot of tiresome work, such as invoicing and inventory management. If the adoption rate would move to a rate of 100%, there would be efficiency, transparency and appropriateness in the financial reporting structures in NGO's.

Keywords: Computerization, Financial reporting practices, Performance in non-government organizations.

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Contribution of this paper to the literature

All of the previous studies evaluated were conducted in foreign contexts (such as Nigeria, Indonesia, Iran, Jordan, Saudi Arabia [UAE], Sri Lanka, and so on), not in Zambia, and not in multinational enterprises, with NGOs serving as the primary implementation. As a result, their findings cannot be extrapolated or applied to Zambian non-governmental organizations.

1. Introduction

Computerized accounting plays a very big function in many organizations in improving working conditions. (Wickramasinghe, Cooray, Dissanayake, & Pamarathna, 2017). In order to improve efficiency and productivity, many companies adopt the use of computers to perform critical functions, including accounting functions; development of payroll systems, control of inventory, budgeting, cost and profit analysis. The development and availability of computerized accounting system tools help in the elimination of errors and enhance performance (Sherman & Young, 2016).

Financial reporting activities typically include details provided in statements of operations, position statements, cash flow statements, funding sources, and disclosure statements. According to Kingi (2013) It is a computerized system in which financial transactions are collected or entered into a computer and analyzed in order to generate necessary documents and thus journalize the financial records to provide the required accounting journals. According to the IFRS Foundation (2015) primary goal of a computerized accounting system is to produce reliable and accurate information or statements on a timely basis. This makes the reports to be relevant, intelligible, verifiable, and comparative to others. Many public and private businesses are making the transition to computerized accounting systems owing to the drawbacks that come with non-computerization.

1.1. Problem Statement

Technological advancements have led to increased computerization in various sectors, including NGOs. However, the adoption rate of computerized accounting systems in Zambia remains uncertain. NGOs are expected to maintain accurate and transparent financial records, but many do not. Researchers are interested in understanding the accounting systems used by Zambian NGOs to increase productivity and efficiency. It is believed that inadequate record keeping in non-governmental organizations has led to insufficient financial responsibility on the whole, a symptom of both a deficiency in internal controls and accounting systems. Non-governmental organizations must be investigated, it is a significant source of concern for commercial and government institutions to establish the credibility of their reporting system. This issue has resulted in the most significant financial scandal to influence organizational trust. Therefore, the researcher sought to assess the adoption and use of computerized accounting systems in non-governmental organizations on the Copperbelt and its effect on performance.

1.2. Purpose of the Study

The study sought to assess the effect of use of computerized accounting systems on organizational performance and the effect it has on the performance of Non-organizations on the Copperbelt Province of Zambia.

1.3. Objectives of the Study

The objectives of the study were to examine the rate of adoption of computerized accounting systems in NGOs in the Copperbelt Province of Zambia and establish the strength of the relationship between computerized accounting systems and organizational performance in NGOs in the Copperbelt Province of Zambia.

1.4. Research Questions

The research question to be answered was.

1. What is the adoption rate of computerized accounting systems in NGOs on the Copperbelt Province?
2. What is the strength of the relationship between the computerized accounting system and the organizational performance of NGOs on the Copperbelt?

Several writers examined the connection between an organization's performance and its computerized accounting system.

- Akande (2016) concur that computerized systems improve production performance.
- Rehab (2018) found that the use of computerized accounting information systems improves the financial standing of most businesses.
- In contrast to Ahmed (2017) analysis, which found no significant correlation between computerized accounting systems and organizational performance, none of the aforementioned writers examined the relationship between computerized accounting systems and the operations of non-governmental organizations.

1.5. Significance of the Study

This study's findings may contribute to the current body of knowledge and provide a better understanding of the computerized accounting system in non-governmental organizations in terms of organizational performance. The conclusions from this study may also be relevant to the stakeholders working in non-governmental organizations.

2. Literature

Technological advancements have led to increased computerization in various sectors, including NGOs. However, the adoption rate of computerized accounting systems in Zambia remains uncertain. NGOs are expected to maintain accurate and transparent financial records, but many do not. Researchers are interested in understanding the accounting systems used by Zambian NGOs to increase productivity and efficiency. Numerous

research projects have been carried out to investigate the connection between local and global organizational performance and computerized accounting systems. According to studies by [Adelisa \(2017\)](#); [Akesinro and Adetoso \(2016\)](#) and [Akande \(2016\)](#) computerized accounting systems can enhance factory performance. Therefore, improved performance is a result of using computerized accounting systems in conjunction with transparency and employee training. In a similar study, [Abubakar \(2013\)](#) presented financial performance possibilities for CAS installations that could improve the financial performance of depository institutions via computerized accounting. As a result, [Rehab \(2018\)](#); [Agbim \(2013\)](#) and [Khan \(2017\)](#) discovered that implementing computerized accounting improved the financial reporting system. Studies by [Ali, Omar, and Bakar \(2016\)](#); [Ayman and Barjoyai \(2019\)](#) and [Asep, Acip, and Hamidah \(2014\)](#) have shown that computerized accounting systems have a considerable impact on the organization's continuous performance.

3. Methodology of the Study

3.1. Research Study Area

The study focused on four towns in the Copperbelt province of Zambia: Kitwe, Mufulira, Chingola, and Ndola. Of these, 100 sample size were chosen, with 40, 20, 20 and 20 respondents chosen in each of the towns.

3.2. Study Design

This study used a mixed method approach, quantitative and qualitative research design methodologies.

3.3. Research Instruments

This study used three basic data collection methods.

- One to one interview.
- Observations.
- Physical and online questionnaires.

3.4. Sample Size

A sample size of 100 respondents, including departmental heads, cashiers, accountants, senior officers, and departmental managers was chosen specifically to demonstrate the degree of validity of the instruments. The researcher used a Simple Random Technique to choose respondents from 5 NGOs, focusing on employees and staff working in Finance & Accounting, Human Resources (HR), Management, and Donor Staff.

3.5. Data Processing

Data processing was done by the researcher to validate the information gathered. This was done to guarantee that the data collected is uniform and complete. The researcher edited the data, making sure it was accurate and valid and that there were no potential gaps, omissions, or mistakes.

3.6. Data Analysis

Quantitative data were analysed graphically, this was further entered onto a computer and encoded using the Statistical Product and Service Solutions (SPSS).

Qualitative data were analysed using the constant Comparative Method. This involved making reading through the data carefully and noting how the data collected is related to the research questions ([Strauss & Corbin, 1990](#)).

4. Findings of the Study

The question to be answered was.

1. What is the adoption rate of computerized accounting systems in NGOs on the Copperbelt Province?

The study revealed that of the five NGOs that were visited, four had adopted computerized accounting systems in place, representing an 80% adoption rate, and only one was using a manual accounting system, representing a 20% non-adoption rate in Chingola town on the Copperbelt province of Zambia, as depicted in the table below:

4.0 Findings of the study

The question to be answered was.

2. What is the strength of the relationship between the computerized accounting system and the organizational performance of NGOs on the Copperbelt?

The test findings showed that the performance of non-governmental organizations and their computerized accounting system had a highly significant positive relationship ($r = 0.730$, $p = 0.022$). Following the Pearson Correlation criteria on degrees of correlation in the Data Analysis Section, which specify that when r is (-1 to +1) shows a high score implies high association, while a score near zero indicates no correlation, the researcher came to this result.

Table 1. Presents adoption of computerized system.

Towns	KITWE	MUFULIRA	CHINGOLA	NDOLA	TOTAL	%
Adoption	2	1	0	1	4	80%
Non-adoption	0	0	1	0	1	20%
No. of NGO's selected	2	1	1	1	5	100%

During the investigation, it was also observed that four of the organizations had computerized accounting systems, two NGOs adopted the system 2-3 years ago, one NGO implemented the system 6-7 years ago, and one NGO adopted the system 7 or more years ago. According to the responses, Sage Pastel is utilized in three of the four non-governmental organizations (NGOs) on the Copperbelt, accounting for 75% of the software's usage. QuickBooks was identified at one NGO, accounting for 25% of the product's use on the Copperbelt. The initial cost

of installation, user-friendliness, and maintenance cost were identified as the primary variables driving management's acceptance and implementation of accounting software in non-governmental organizations. Cost benefits and other considerations like training, worker adaptation, maintenance costs, and after-sales services have less impact on adoption decisions.

Table 2 Presents Test findings Computerization and Performance.

Table 2. Test findings computerization and performance.

Correlation of computerized accounting system and performance			
Performance			
Computerization	Pearson Correlation (r)		0.730
	Sig. (2-tailed)		0.022
	N		100

The results of the research showed an advantageous connection between the performance of non-governmental organizations in the Copperbelt and computerized accounting systems. The respondents went so far as to say that an organization's performance can be affected by the design and upkeep of its accounting system. Computerized accounting systems encourage employees to work hard, which improves performance over time. It was also discovered that the positive impacts of a computerized accounting system were not only focused on punctuality, productivity, and understandability, but also increased transparency, resulting in (Openness, Honesty, and Reliability) in the organization. This is in line with the findings of Needles and Powers (1999) who emphasized in their book that an effective accounting system achieves the organization's main goals. They also mentioned that trustworthy accounting records are produced by effective accounting systems. As a result, effective computerized accounting systems may help the company accomplish its goals. Another benefit of the computerized accounting system that the researcher discovered during the investigation was proper accountability.

5. Discussions of Findings

5.1. Adoption

It can be seen in Table 1 that 80% represents adoption rate and 20% non-adoption rate. According to the responses, the adoption of a computerized accounting system achieves the organization's overall objectives. It was noted, however, that a number of factors influence the computerization of accounting systems, including the size of the business, the number of highly qualified employees, the availability of funds for the system's purchase and maintenance, and the availability of legitimate software for these companies to use.

This agrees with Needles and Powers (1999) who stressed in their book that a good Computerized Accounting System accomplishes the broad objectives of the organization. Further, this is supported by Adelisa (2017) who concluded that a computerized accounting system gathers, organizes, analyzes, interprets, and presents data to users for the decision-making process. "An organization can run smoothly, and produce good reports even without computerization, even in the olden days organizations were still operating effectively" This was one of the statements made by a Human Resources Department representative. This implies that there are still those who are at ease with manual accounting and yet hold the belief that computers should not be used. A few people in the Copperbelt Province have not recognized the disadvantages of a manual accounting system. According to the study's findings, most non-governmental organizations are transitioning to computerization, nevertheless at a slow rate compared to how technology is evolving. The book "Fundamental Accounting Principles" by Larson and Jensen (2015) emphasizes that an accounting information system is made up of different parts that collect and process raw financial data to provide timely, accurate, cost-effective, and relevant information for users inside and outside the company. What the researcher discovered was consistent with Hamidah (2014) quote that "computerized accounting systems have a considerable impact on the organization's continuous performance" and the researcher strongly believes that the cost of software installation influenced computerized accounting adoption. Most software with a high installation cost is not widely adopted. The factors driving adoption, according to respondents, also included maintenance costs and user usability. The majority of non-governmental organizations (NGOs) don't use accounting systems that are hard to use or comprehend and require high maintenance costs. Additionally, it was found that the benefits of computerization have increased the relevance, comprehensibility, reliability, and comparability of the financial information these NGOs provide to funders, as well as the speed, timeliness, correctness, and quality of reports. The effects are evident in the ongoing support that local non-governmental organizations (NGOs) receive, particularly when contrasting the money received by those who utilize computerized accounting systems with that of those who do not.

5.2. Computerization and Performance

According to Qatanani and Hezabr (2015) and Fardinal (2013) computerized accounting systems benefit from built-in internal control features. These features allow the system to implement and execute various administrative and internal accounting controls at various stages of the accounting process, such as financial statement preparation, reconciliations, and budgeting. Ahmed (2017) and Onaolapo and Odetayo (2012) on the other hand, found a favorable but not significant relationship between computerized accounting systems and organizational performance in SMEs in Kenya. Additionally, Oladipupo and Ajape (2013) and Bawa, Mustapha, and Ahmed (2018) discovered a significant impact on accounts receivable management utilizing Computerized Accounting System (CAS) among Nigerian Small and Medium Enterprises (SMEs) using the ANOVA analytic methodology.

According to Ayman and Barjoyai (2019) there is a strong and positive correlation between CAS and the performance of the banking sector. The results from this study showed that the performance of non-governmental organizations (NGOs) and their computerized accounting system had a highly significant positive relationship. This is also supported by one respondent from the Accounts Department who remarked that "When the accounting system is poor, so is the reporting structure and quality of output reports" The findings of this study demonstrated a considerable positive relationship between performance in non-governmental organizations

(NGOs) and computerization. Although computerization requires large expenditures, the benefits far surpass the expenses. It was also established that transparency in reporting, error-free reports, and meaningful reports promote smart decision-making and help to ensure the continuous flow of funding from contributors.

6. Conclusions and Recommendations

According to the study, most local non-governmental organizations in the Copperbelt are able to consistently secure funding because they have maintained appropriate computerized accounting systems that have improved the relevance and value of their financial reporting system. The study suggests the adoption and computerization of the financial reporting and accounting procedures of non-governmental organizations. This enhances staff members' technological proficiency and benefits the company as a whole, bringing value to the workforce.

Technology is moving at an advanced pace and it is the main reason why many NGOs are migrating to computerized accounting systems because computerization comes with more benefits ranging from accuracy in reporting, transparency enhancement, and quick decision-making processes. This has brought about strong financial reporting procedures in many business sectors of the economy and many donors are now demanding that non-governmental organizations computerize their accounting systems.

6.1. Recommendations

The study recommends management training and personnel development in order to be up to date with technological advancements and professional career development. It also suggests a higher adoption rate from 80% to 100%. Funders expect accurate and transparent reporting from NGOs, so all organizations must join forces to improve transparency and reporting through computerized accounting systems. Organizations should hire competent staff who can quickly adapt to new system changes and use computers. Vendors of accounting software should host webinars to promote their products. The study also emphasizes the importance of computerized accounting systems in organizations for accountability, asset protection, and proper record-keeping.

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