

## **EFFECTIVENESS OF ACCOUNTING INFORMATION SYSTEM ON PERFORMANCE OF RETAIL STORES: A REVIEW OF OK GWERU SUPERMARKET**

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### **ABSTRACT**

*This study investigated the impact of accounting information systems (AIS) on the performance of retail stores, with Ok Gweru supermarket as the case study. The traditional manual accounting systems used by supermarkets have been replaced by computerized accounting systems due to globalization. However, these systems sometimes fail to process transactions quickly and are also vulnerable to criminal attacks. The study aimed to identify the reasons for these problems and provide solutions to address them in the retail industry. The research design involved a sample of 36 respondents, stratified according to their job roles. Data was collected using questionnaires. The study found a positive relationship between AIS and performance, as integrated systems that meet the basic reporting requirements of IFRS and GAAP can produce relevant information for sound economic decisions. Staff training to ensure user competency was found to be necessary, and supermarkets were identified as being at risk of cyber-attacks due to a lack of resources to protect their systems. It was recommended that these issues be continually discussed with employees to increase awareness of these malicious activities and how to counter them.*

**Keywords:** Accounting Information System, Performance, Retail Stores, Economic Decisions.

### **1. BACKGROUND OF THE STUDY**

Chionye (2020) offers a definition of the accounting system as a creative method of identifying, documenting, categorizing, quantifying, and interpreting an organization's financial transactions in a way that is relevant to making informed decisions. Its purpose is to regularly consolidate the information it contains and present it in a way that is useful to interested parties for decision-making. Similarly, Hussey (2019) characterizes the accounting system as a system that is specifically designed to record accounting transactions and business events, while ensuring that policies and procedures are adhered to. For Hartzell (2021), an effective accounting system requires a consistent approach to organizing, recording, summarizing, and reporting financial transactions.

To assist management in policy decision-making, budgeting, grant proposals, and other financial reports, the accounting system must provide financial information. Consistent accounting treatment is also essential for similar transactions. Ama (2019) defines the accounting system as a structured system that identifies, measures, accumulates, analyses, prepares, interprets, and communicates accounting information to a particular group for a specific entity. The use of the term "structured system" implies that the accounting system operates in adherence to established rules, regulations, methods, procedures, and techniques. Additionally, the system is implemented as a habitual and systematic process.

An accounting system is a financial information system designed to gather and distribute information to support group decision-making, according to Amater's (2021) analysis. It comprises accounting terminology, record-keeping manuals, flow charts, programs, and reports tailored to meet specific business needs. The system regularly manages events that impact the financial performance and position of the organization.

Lawani et al. (2018) state that accounting information is valuable when it can predict future earnings, dividends, or cash flows. The impact of AIS on the sustainability of Nigerian SMEs can be evaluated, and its value relevance can be determined by measuring returns generated from trading strategies based on accounting information.

Proper accounting knowledge is critical for effective administrative management, which enhances the survival of small-scale enterprises in Nigeria by serving as a vital source of information for SME owners and managers, enabling the measurement of financial performance (Maseko & Manyani, 2019). Okoh and Uzoka (2020) found that accounting information is a significant factor in the success of small-scale businesses in Nigeria, although not the only one, through structured questionnaires and chi-square analysis. The successful implementation of AIS relies on their ability to leverage employee skills and proficiency (Koitumet et al., 2018). Competence is crucial for effective AIS performance, according to Haleem and Kevin's (2018) study on AIS adoption in Sri Lanka's banking industry. Napitupulu and Dalimunthe's (2017) research found that employee competency is significantly linked to successful AIS deployment, while Hendriks (2019) identified staff competency as a significant obstacle to efficient deployment of integrated financial management information systems in South Africa's public sector.

### **1.1 Research question**

The research question was:

What is the effectiveness of accounting information system on performance of retail stores?

## **2. EMPIRICAL REVIEW**

### **2.1 The effectiveness of accounting information systems on performance of retail stores**

According to Mia (2020), accounting information systems (AIS) are perceived as a valuable tool for delivering financial information within an organization. Haitham et al. (2019) acknowledge the potential of AIS as a modern information system to greatly impact enterprise performance. Businesses have widely adopted information systems to automate and integrate their operations, as noted by Saira, Zariyawati, and Annuar (2019). The implementation of AIS is critical for organizations in achieving and supporting strategic positions, as Rosa and Purfini (2019) suggest. The definition of AIS provided by Emeka (2018) emphasizes the role that financial and accounting data plays in assisting managers with decision-making related to planning, controlling, and evaluating. As such, the uniqueness of experiences can result in experiential differences, as noted by Yu (2020). Hosain (2019) defines AIS as an IT or IS tool that aids organizations in their monetary and economic functions. Urquia et al. (2019) describes AIS as a system that records financial transactions, utilizing accounting technology, methodologies, and controls to track transactions and generate internal and external reporting data, financial statements, and trend analysis capabilities.

Effective analysis and monitoring of a company's financial status requires the implementation of accounting systems. These systems are responsible for preparing necessary documents for tax purposes and providing information to support various organizational functions, including production, marketing, human resources management, and strategic planning Harash et al., (2018). According to Nicolau (2020), AIS is a computer-based system that enhances control and cooperation within the organization. AIS helps accountants capture non-accounting evidence for better business decisions (Mandal & Chakraborty, 2022). Owusu-Frimpong et al. (2021) found a positive relationship between AIS and performance measures for SMES in Ghana. Lee et al. (2021) define AIS as a system that processes data and transactions to provide information for efficient business planning, control, and operation.

Accounting data undergoes several processes to produce accounting information that is vital for informed financial decision-making necessary for sustainable economic development in business entities of all sizes and types Kusuma & Rukayah, (2022). Therefore, building up an effective accounting information system (AIS) is necessary to integrate management's requirements for planning, control, and decision-making, making

it a crucial aspect of organizational survival Kasih, (2021). Computer technologies play a significant role in enabling accounting information systems (AIS) and are often designed to achieve qualitative decision-making objectives that are essential for business success Sobhy and Abdelkader, (2021). Information provided by computerized accounting systems must meet the basic attributes recognized under Generally Accepted Accounting Principles (GAAP) for good accounting information. AIS is a computer-based system that increases control and fosters collaboration within an organization. Companies can adjust their computerized internal control mechanisms to suit their needs Shahid et al (2021).

It is crucial to ensure the accuracy the objective of Nguyen et al. (2022) was to enhance the effectiveness of control measures to achieve financial information reliability, as well as improve the reliability of financial information processing. A study conducted among construction companies shows that the adoption of AIS has a significant impact on organizational effectiveness Siregar et al (2021). Many organizations have adopted information systems to improve their efficiency and increase competitiveness, which in turn enhances management commitment and improves the effectiveness of their information systems (Gupta & Shukla, 2021). Management commitment refers to the behaviour and actions of managers to support and achieve organizational goals (Liu et al., 2019). The primary function of accounting information systems (AIS) is to assign numerical value to economic events that occur in the past, present, or future, and the qualitative characteristic of AIS is maintained through a robust internal control system (Hassan et al., 2021).

The IASB's financial reporting framework considers information relevant if it can impact users' economic decisions by evaluating past, present, or future events or verifying prior assessments (IASB, 2018). Sajady et al. (2018) suggest that AIS provides benefits in decision-making, accounting information quality, performance evaluation, internal controls, and business transactions. However, Omar and Ali (2019) did not find a significant relationship between variables of interest in their study on the impact of AIS on planning, controlling, and decision-making processes.

According to Kaur and Kaur (2022), user information satisfaction refers to the perception of effective decision-making and monitoring when a company has coordination and control over the information generated by its accounting information system (AIS). In addition, Saeed and Ahmed (2021) highlight the importance of fundamental accounting knowledge for small business owners and managers. This knowledge equips them with the necessary skills to competently manage daily transactions, such as bookkeeping, purchasing, and budgeting, as well as ensuring accurate financial and working capital management.

## ***2.2 The relationship between application of manual accounting system and Computerized accounting system***

Traditionally, organizations engaged in the production of their business documents, maintenance of their books, and prepared their accounts through manual means. This method entailed the performance of operations by a clerk, who was assisted by specific pocket calculators or adding machines if necessary. This mode of computation is appropriate for situations where the quantity of data to be processed is minimal and there is no significant emphasis on the duration allocated for completion. The course of action is reasonably simple, and often the hiring of added personnel can easily resolve the issue of time restrictions.

According to Marrian (n.d.), the specialized journal system is a method used to streamline the journalizing and posting procedures in accounting. The process of grouping transactions into categories and recording and posting them using the double-entry record-keeping method is a common practice in accounting, whether in a manual or computerized system (Warren et al., 2021). In a manual system, this process is typically done by hand, either on physical paper journal or ledger sheets or in a computer program, such as Excel. Each transaction is entered into the system individually, making it a time-consuming process. However, this system also involves interpreting the information in the general journal and posting it to the general ledger, which is the foundation for introducing accounting procedures in organizations that use manual accounting systems.

Before recording entries in the ledger account, a significant amount of detailed work is necessary to provide the relevant information. For instance, payments for wages and salaries require an invoicing system using the payroll system, while all sales and purchases transactions affect the stock and must be meticulously recorded in a record-keeping system (Ndubuisi, Chidoziem, Chinyere, 2017).

In recent decades, automated accounting systems have become increasingly favoured over manual ones. It is possible that workers may never have to manually record sales journal entries ever again; however, it is crucial that they understand the inner workings of double entry systems and how data flows through manual systems. In the past, accounting was done manually by business owners, but the world is now experiencing a modern technological civilization where computers assist with many tasks. This could plausibly be the explanation for why businesses are witnessing the fast changes occurring in the world, Ming (2018). The utilization of effective and advanced software is of great assistance. In contrast, manual accounting entails employees performing the entire accounting cycle manually, periodically calculating trial balances, journalizing transactions, and preparing financial statement reports and other routines. This process undeniably requires substantial time, resources, and effort in larger organizations.

Conversely, computerized accounting necessitates solely recording transactions into the computer, with the remaining steps of the accounting cycle being processed automatically or by request. Ama (2018) defines this system as one that utilizes specialized machines such as calculators and computers to gather information, commonly known as the Electronic Data Processing (EDP) Accounting System. A system for accounting that is based on computers operates in a similar manner to a manual system, as both systems initially record transactions manually on source documents. However, in a computer-based system, the data from these source documents are then inputted via key pressing into punched cards, which can be read by the computer. After the data is entered into the computer-based accounting system, the system processes the information automatically and performs standard tasks such as printing journals, posting information to ledger accounts, calculating account balances, and producing financial statements and other reports.

It should be noted that a computerized accounting system, according to Merriam's online dictionary, allows users to enter transactions into the program once, and all accounts are updated accordingly. However, this is a simplified view, as transactions encompass a range of complex categories, including sales or acquisitions, depreciation, premiums, wages calculation, dividends, and more. While computers can provide accurate calculations and generate intelligent reports, this process requires significant time, resources, and effort, making it difficult to determine which accounting type is faster and more economical.

Moreover, utilizing a computerized accounting system requires accountants who possess specific software skills, which increases costs. While computer software calculates faster, it cannot determine user needs, which must be clearly explained. Furthermore, a top-notch computerized accounting system may demand a substantial investment, sometimes reaching millions of dollars, based on the intricacy and scale of the enterprise, as stated by Weber (2019). Moreover, computerized accounting offers an enhanced internal control report system during any given period. The computer has the capability to simultaneously monitor thousands of indicators and generate notifications to the appropriate departments or workers if any indicators deviate from the normal state. In contrast, manual control requires more time and effort Weber (2019).

The petite and intermediate enterprises (SMEs) in Lipa City are presently confronting an extremely aggressive business climate. As every management seeks to invest in this rapidly growing sector, it is expected that the financial management operations and practices of SMEs in Lipa City will continue to evolve and improve to mitigate existing challenges Sarmiento, et.al (2019). In today's globally interconnected and computerized business environment, Computerized Accounting Systems serve as the "engine of growth" for business organizations. These systems involve the computerization of accounting information to facilitate effective decision-making. They offer numerous benefits, including the speed of carrying out routine transactions, timely processing, quick analysis, accuracy, and reporting Genil and Valencia, (2019).

The researchers conducted this study to determine the most suitable accounting system due to its importance. They acknowledged the advantages of both manual and computerized accounting systems and aimed to understand whether organizations still use manual accounting and consider transitioning to a computerized system. The results of this study could provide valuable insights for entrepreneurs on the challenges faced by users. As per Marriam's (2018) online exposition, there are discrepancies between the computerized accounting system and the manual system, which encompass swiftness, expenses, and backup:

### **2.2.1 Speed**

Automated calculations in accounting software enable faster data processing and report generation compared to manual systems, which is the primary difference in speed between the two. Computerized systems allow for easy report creation by pressing a button once data is inputted, reducing the likelihood of errors and improving efficiency.

### **2.2.2 Cost**

Another distinguishing factor between a manual and computerized system pertains to its expenses. In contrast to a computerized system that necessitates a machine, software, training, and program maintenance, manual accounting with paper and pencil incurs significantly lower costs. The expenditure for printers, paper, ink, and other supplies can rapidly accumulate in the case of a computerized system.

### **2.2.3 Back-up**

A notable distinction between manual and computerized systems is the convenience of data backup with the latter. The entirety of transactions can be effortlessly saved and backed up in the event of a fire or any other unfortunate occurrence. Conversely, with paper records, the sole option available would be to manually duplicate all pages which is a tedious and impractical process.

### **2.2.4 Why accounting systems are targeted by criminals in supermarkets.**

Supermarkets hold a crucial position in the economic progression of nations worldwide. Due to economic globalization, there has been a resurgence of interest among researchers since the 1990s in re-evaluating the role of local supermarkets in the development process, as stated by Narver and Slater (2020), Alfred and Wilson (2016). Given the prevailing economic globalization, supermarkets face an array of challenges and prospects that stem from transformations in the global economy, as observed by Dominguez and Mayrhofer (2017). Globalization is often viewed as a convergence of interconnected production systems, cultures, and political processes in the contemporary world, as Aspers and Kohl (2015) have discussed.

Martin (2021) states that the liberalization of trade, facilitated by the WTO trade regime, has accompanied the advent of globalization. This transformation affects economic culture and political systems in terms of dependency shapes. Todaro and Smith (2015) suggest that globalization presents new opportunities for eliminating global poverty and benefits poor nations through cultural, social, scientific, and technological exchanges, as well as trade and finance. Ahmedova (2015), WTO (2016), and Prasanna et al. (2019) recognize global economic globalization as an opportunity for both developed and developing nations to enhance economic prosperity by participating in global trade. Kapoor, Mugwara, and Chidavaenzi (2015) suggest that supermarkets have demonstrated greater adaptability and responsiveness to market changes than other businesses in Zimbabwe and globally. They also require less capital and have the potential to generate significant employment opportunities for skilled and semi-skilled labour. According to the National Retail Federation, (2019) the existing literature posits that the information systems employed by retail stores are subject to targeting by offenders for a variety of reasons. A significant factor is the considerable quantity of financial data generated by retail establishments, rendering them a desirable prey for cybercriminals seeking to pocket sensitive information. Additionally, the AIS utilized by retail stores frequently possess invaluable customer data, encompassing credit card particulars, which are susceptible to exploitation for deceitful pursuits.

Retail stores' AIS are often targeted by criminals due to the weaknesses of their systems, which can be attributed to various reasons. One such reason is the use of outdated or poorly secured software by many retail stores. This makes it effortless for cybercriminals to exploit vulnerabilities and acquire access to confidential financial information. Furthermore, the presence of a significant number of employees who necessitate access to the AIS in retail stores augments the likelihood of insider threats, thereby amplifying the risk factor IBM, (2019). The available literature further posits that the surge in online shopping has rendered retail stores increasingly prone to cyber-attacks, Ponemon Institute (2018). The nature of online transactions entails the exchange of sensitive financial data, rendering them a prime target for malicious cyber actors. Therefore, retail stores that have failed to integrate robust security protocols for safeguarding their online transactions are at a greater risk of falling victim to cybercriminals.

Overall, the existing body of literature indicates that the information systems of retail establishments are a prime target for criminal activity, primarily due to the vast amount of financial data they generate, the invaluable customer information they possess, the proneness of their systems, and the surging trend of online commerce. Therefore, it is of utmost importance for retail stores to devise strong and comprehensive security measures aimed at safeguarding their information systems and preventing cyber-attacks. Such measures may include routine software updates, employee training on cyber security best practices, and the utilization of encryption technologies to secure sensitive financial information, Javelin Strategy and Research, (2019).

### ***2.2.3 Challenges being faced in the adoption of accounting information system by retail stores***

The implementation of an accounting information system (AIS) has the potential to provide a multitude of advantages to retail establishments, such as enhanced financial reporting, heightened productivity, and improved decision-making capabilities. Nonetheless, the adoption process may pose certain difficulties for retailers. This review of academic literature delineates several obstacles that retail outlets encounter when incorporating AIS. One of the primary obstacles is the expenditure associated with implementation and upkeep. As highlighted by Ghosh and Mondal (2018), the expenses related to the arrangement of an AIS can be exorbitant, especially for SMEs. These costs encompass not solely the software, but also hardware, education, as well as continuing maintenance and assistance. Consequently, retailers with limited financial resources may face a significant hurdle.

According to a recent study by Amankwah-Amoah and Ifere (2021), one of the major challenges faced by retailers in relation to their Accounting Information System (AIS) is the need for staff training. The successful functioning of the AIS is highly dependent on the skills and proficiency of the staff operating it. As such, supermarkets must allocate resources for staff training to ensure that they have the necessary competencies to operate the system effectively. However, as noted by Amankwah-Amoah and Ifere (2021), training can be a costly and time-consuming exercise, particularly in cases where staff turnover is high. The complexity of the retail system poses a formidable challenge for stores. According to Otley (2016), the adoption of AIS can be intricate and demanding to comprehend, especially for smaller stores with constrained resources. This may engender a reluctance to implement the system, as it may be perceived as excessively intricate or not worth the investment.

Furthermore, compatibility with other existing systems presents another challenge for retail stores. Ghosh and Mondal (2018) highlights that supermarkets may have prior systems in place, such as point-of-sale or inventory management systems, which must be taken into consideration. The AIS must be compatible with these systems to ensure that data can be flawlessly integrated. Incompatibility may result in the need for additional resources to integrate the systems or lead to inconsistencies in the data. Intricacy. It can be argued that the incorporation of an AIS into retail stores can yield substantial advantages. Nonetheless, there exist several obstacles that deserves attention, namely the expenses associated with adoption and upkeep, the necessary training of personnel, the sophistication of the system, and the need for compatibility with prior

systems. Hence, retailers must precisely assess these challenges and devise strategies to surmount them to guarantee a triumphant adoption of AIS.

#### **2.2.4 Computerized accounting system**

The topic of the influence of computerized accounting systems on financial performance has been extensively examined in scholarly discourse. The proliferation of computerized accounting systems has prompted numerous studies that have provided detailed analyses of this subject.

Regarding accounting information in Tanzania, a comprehensive analysis of the empirical studies for this study is provided by the following research. Anael (2017) evaluated the impact of using computerized accounting systems on the performance of organizations in Tanzania, particularly local government authorities (LGAs) in Arusha, was studied. The analysis suggested that the administration must impart appropriate education to bookkeeping staff to improve their, understanding of the accounting structure and accomplish better results. Another study undertaken by Munisi (2019) aimed to evaluate the efficacy of computerized accounting systems in ensuring financial control within local government authorities in Tanzania, using Musoma district council as a case study. Upon conducting a thorough data analysis, the research findings demonstrated that computerized accounting systems have a significant impact on overall financial control in Musoma district council. Consequently, the author recommended that administrators should be implemented to supervise and impede unauthorized access to the accounting system.

To broaden the scope of empirical studies, Bahati (2014) assessed the influence of computerized accounting on payroll accounting performance via a case study conducted in Urban Water and Sewage Authorities (UWASA). The outcomes indicated that the adoption of computerized accounting systems in accounting practices has both favourable and unfavourable consequences. In view of these results, the author recommended that UWASA should proceed to incorporate a computer information system and provide finance and human resource department staff training to prevent financial losses and reduce the risk of fraudulent activity. The study carried out by Muhindo, Maurine and Zhou (2014) revealed a strong correlation between accounting information and the level of profitability in Small and Medium-sized Enterprises (SMEs). It is noteworthy that most SMEs lack an Accounting Information System (AIS), leading to diminished performance levels. Osuala (2009) concurred that fundamental accounting information is crucial for sustaining business operations. The absence of such accounting information among SMEs represents a significant hurdle, posing a real threat to their continued existence. The strategic importance of utilizing AIS has been substantiated by Amidu, Effah and Abor (2017), who assert that the use of accounting information can determine the success or failure of SMEs. Therefore, it is imperative for SME owners and managers to ensure that accounting information is promptly updated and accurate Amidu, (2018). The escalating dependence on information technology underscores the vital need to enhance business efficiency Lallo and Selamat, (2014). The substantial evidence presented by Saira et al. (2020) suggests that it is highly unlikely for financial accounting not to be the primary source of information for managers in small and medium businesses (SMEs). Consequently, the utilization of AIS assumes a crucial role, thereby contributing significantly to the company's value addition by furnishing internally generated inputs, for instance, financial statements that foster the formulation of superior strategic plans Sori, (2019). Ismail and King's (2017) empirical inquiry illuminate that AIS employment can be optimized through the implementation of novel information systems that align with SMEs' performance.

According to Olamide and Adeyemi (2019), the adoption of computer technology has significantly enhanced Accounting Information Systems (AIS). The integration of computer technology has enabled the analysis of large volumes of data and the generation of precise and timely reports. Digital technologies, such as networking environments, credit card facilities, point of sales systems, standalone personal computers (PCs), and the telephone, have been developed. Ritchie and Brindley (2017) and Ogundana et al. (2018) state that information technology enables the collection, organization, storage, processing, and transmission of

information both within and outside organizations, including small and medium-sized enterprises (SMEs). This tool has been instrumental in enabling businesses to improve competitiveness, exploit new market opportunities, and provide specialized information services, among other benefits.

Since the arrival of computer technology in the 1950s, there has been a growing trend towards advancing information storage and processing. It is crucial to note that the quality of data greatly influences the output of AIS. Therefore, the production processes, data collection, usage, storage, and utilization must be executed correctly to achieve high-quality data, as emphasized by Xu (2019). The effective deployment of accounting information systems (AIS) is significantly influenced by the ability and dedication of accounting managers, and the responsibility for implementing and accepting AIS within an organization lies with senior management (Suratman & Ridwan, 2017). According to Ouko (2019) and Suratman and Ridwan (2017), top management's support for AIS implementation leads to improved efficacy. Qatawneh et al. (2018) found that the successful adoption of computerized payment management systems and AIS within institutions largely depends on top management's commitment to motivating staff members. Micheni (2017) asserts that senior management is the key determinant in the adoption of information technology within enterprises and organizations, a view supported by Lundu and Shale (2020), who suggest that senior management's positive impact enables them to overcome complex challenges and ensure team performance during the implementation phase.

Haleem and Kevin (2018) conducted a study that examined the significance of user competency in the successful adoption of AIS within the banking industry of Sri Lanka. Their research showed that capability plays a crucial role in the effective performance of AIS. Moreover, technical abilities and expertise were identified as contributory factors to efficacy, rather than possessing absolute worth. In a comparative research study, According to Napitupulu and Dalimunthe (2017), the competence of human resource management has a considerable influence on the effective implementation of AIS for managing accounting information. Hendriks (2019) conducted a study exploring integrated financial management information systems (IFMIS) in South Africa's public sector. The research revealed that staff competency is a significant obstacle to the efficient deployment of IFMIS. The lack of skills and talent among personnel was identified as a contributing factor to the failure to adopt the IFMIS structure and ensure accuracy. This finding is in line with Endraha's (2016) research, which emphasizes the crucial role of operator capability in achieving positive outcomes in AIS adoption.

Perceived usefulness is a critical factor to consider when adopting and implementing automated information systems (AIS) in enterprises. The perceived usefulness of the AIS can enhance management's perception of the system's capability to improve effectiveness and productivity, thereby increasing the intention to integrate and use AIS, which is amplified by performance expectation (Tilahun, 2019). Lanlan and Ahmi (2018) demonstrated that perceived usefulness significantly impacts the adoption of computerized information systems within firms. Similarly, Roztock and Weistroffer (2019) found that perceived usefulness is a crucial factor in user adoption of information technology and investigated the variables that influence technology acceptance on social and economic growth.

Recent research has indicated that users are more likely to support the implementation and adoption of e-government systems if they perceive them to be useful (Asadi et al., 2021; Bhatiasavi & Riemenschneider, 2021). In a study conducted by Zhang (2017) in China, it was found that perceived usefulness had a significant influence on the adoption of computerized accounting systems among SMEs in the cities of Shann Xi and Xian. Furthermore, performance expectations were identified as a crucial factor in regulating behavioural intentions and affecting the adoption of AIS (Zaini et al., 2020). A review of the literature on the factors that impact the adoption of information systems has revealed several theoretical, contextual, and conceptual gaps that the current research aims to address. Scholars such as Lanlan and Ahm (2018) in China, Haleem and Kevin (2018) in Sri Lanka, Hendriks (2017) in South Africa, and Komala (2018) in Indonesia have attempted to bridge these



gaps in their respective nations. However, it is crucial to acknowledge that the settings in which these studies were conducted had distinct political, economic, social, and technical contexts compared to Zimbabwe.

Therefore, the findings of these studies may not be generalizable to the Somali context. As Maina (2019) and Kenya et al. (2015) have also pointed out in their respective studies conducted in Kenya, it is crucial to consider the specific contextual factors that may influence information system adoption in a particular setting. According to Musah et al. (2018), the primary use of Accounting Information Systems (AIS) among Ghanaian small and medium-sized enterprises (SMEs) is to produce periodic reports. The adoption and deployment of AIS within SMEs are mainly driven by financial accounting regulations and compliance with Generally Accepted Accounting Principles (GAAP), rather than International Financial Reporting Standards (IFRS). Although Ghana began adopting IFRS in 2009, its implementation was scheduled for 2012, and most SMEs have not yet adopted SME IFRS.

Approximately 45% of registered SMEs in Ghana use AIS, while 34% use manual accounting systems (MAS) and 21% use both AIS and MAS, according to Musah et al. (2018). However, some entrepreneurs still prefer to record their business transactions on paper, as noted by Mahama and Dahlan (2020). In Ghana, the adoption of AIS by SMEs has been obstructed by various factors. These limitations consist of human, organizational, technological, and environmental issues. The struggle with ICT adoption in Africa, particularly Sudan, persists, as highlighted by Abdulle, Zainol, and Ahmad (2019). These impediments can be of human, organizational, technological, or environmental origin, as noted by El-Dalabeeh (2019).

SMEs often consider IT as a cost rather than a benefit, leading to reluctance in adopting AIS, according to various studies (Darshi et al., 2020; Frimpong et al., 2018; Mabula and Ping, 2018). This reluctance is due to inadequate financial resources, management support, physical environment, and inefficient use of time and resources (Abayomi and Adegoke, 2016). Poor financial record-keeping exacerbates the difficulties in making informed decisions and financial planning. Therefore, training, investment, company culture, and established business processes should be considered when designing and adopting AIS (Dawuda and Azeko, 2019).

### 3. METHODOLOGY

The study adopted a quantitative research approach and questionnaires were used to collect data. The sample of the study were 40 participants. Dana (2020) has defined sampling as a process wherein a portion of the required population is selected for research from a large population. Since sampling the entire population is challenging, research focuses on a concentrated small group that is reliable in terms of judgment. Raherdoost (2020) and Dana (2020) have concurred that sampling is conducted in research because sampling the whole population is difficult. Collecting small reasonable data is faster and cheaper, and thus, sampling techniques are employed. This research concentrates on probability sampling, where stratified random sampling is used. Etikan and Bala (2018) have stated that stratified sampling is one of the best techniques because it provides detailed and reliable information.

Sample size using the Slovin / Yamane formula

$$n = \frac{N}{1 + N(e)^2}$$

$$1 + N(e)^2$$

Where;

n = Sample size

N = Population Size

e = Significant level of error (0.05) or 5%

Where;

N = and e = 0.05 or 5%

n = 40

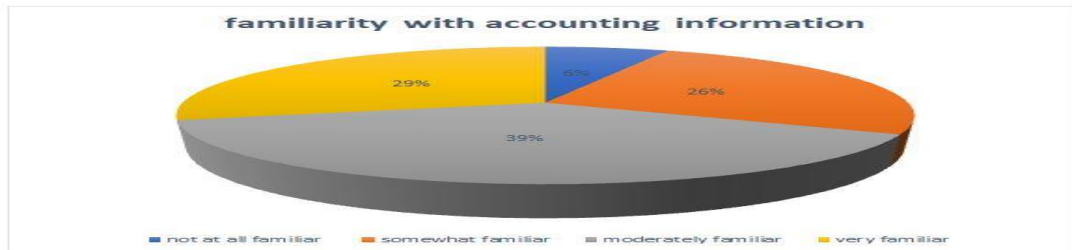
$$1 + N(e)^2$$

n = 40  
 $1+40(0.05)^2$   
 n = 40  
 $1+40(0.0025)$   
 n = 40  
 1.1  
 n = 40  
 Therefore n = 36 sample size.

#### 4. DATA PRESENTATION, ANALYSIS AND DICUSSION

##### 4.1 Familiarity with accounting information systems

The respondents were asked to indicate if they are familiar with accounting information Systems Fig 1 summarizes the responses.

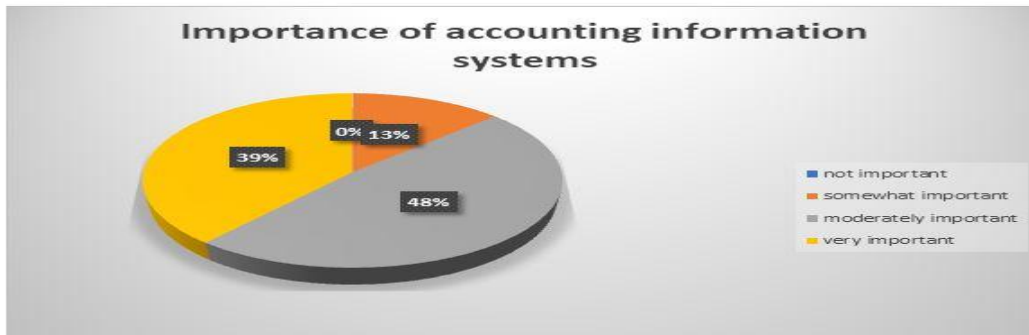


**FIG 1** How familiar are you with accounting information systems used in retail store

**FIGURE 1**

Figure 1 shows that the majority of the participants are either moderately familiar (12) or very familiar (9) with accounting information systems used in retail stores, while a smaller percentage are somewhat familiar (8) and only a few are not familiar (2). This finding suggests that these systems are prevalent in the industry. It is also possible that workers are receiving training on these systems as part of their job responsibilities.

##### 4.2. Effectiveness of accounting information system on performance of retail stores



**FIGURE 2**

**IN YOUR OPINION, HOW IMPORTANT ARE ACCOUNTING INFORMATION SYSTEMS FOR THE PERFORMANCE OF A RETAIL STORE?.**

Source primary data (2023)

Fig 2 above shows that the majority of the participants believe that accounting information systems are either moderately important (15) respondents or very important (12) respondents for the performance of retail store. Only a small number of respondents (4) believe that accounting information systems are somewhat important, while none believe that they are not important. This means that these systems are seen as critical for effective operations. This finding is In line with the importance of accurate financial information for decision making in any business.

**4.3 Improvements in performance**

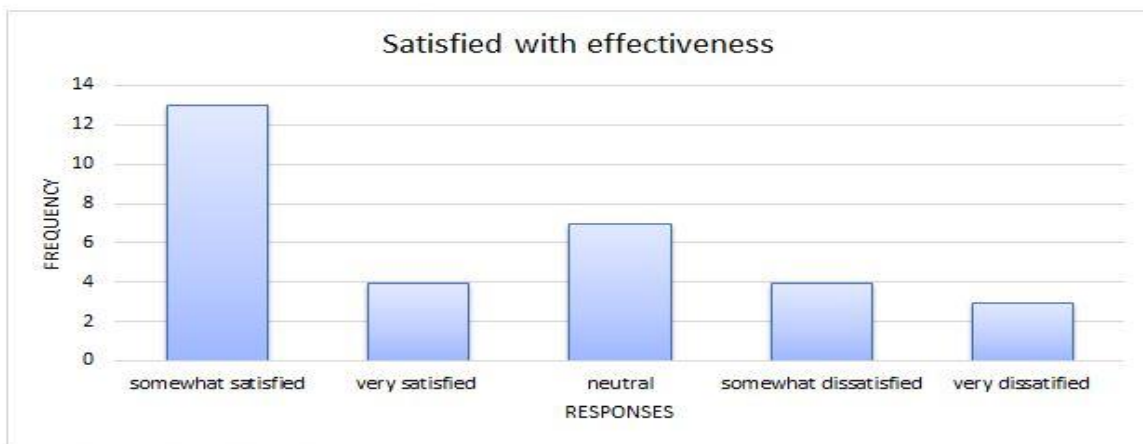
**Table 1. Have you noticed any improvements in the performance of OK Gweru Supermarket since the implementation of their accounting information system?**

	Fequency	Pe Prcentage	Cumulative percentage
Yes, significant improvements	6	19	19
Yes, minor improvements	14	45	64
No noticeable improvements	9	28	92
I don't know	2	8	100

*Source: primary data (2023)*

Table 1 shows that a significant percentage of the participants (45%) have noticed minor improvements in the performance of Ok Gweru Supermarket since the implementation of their accounting information system, while a smaller percentage of (8%) do not know. This suggests that the system has had a positive impact on company’s operations. However, the fact that a considerable percentage of participants have not noticed any noticeable improvements suggests that benefits of the system may not be visible to all workers or that the system is not being utilized to its full potential.

**4.4 Satisfaction with effectiveness**

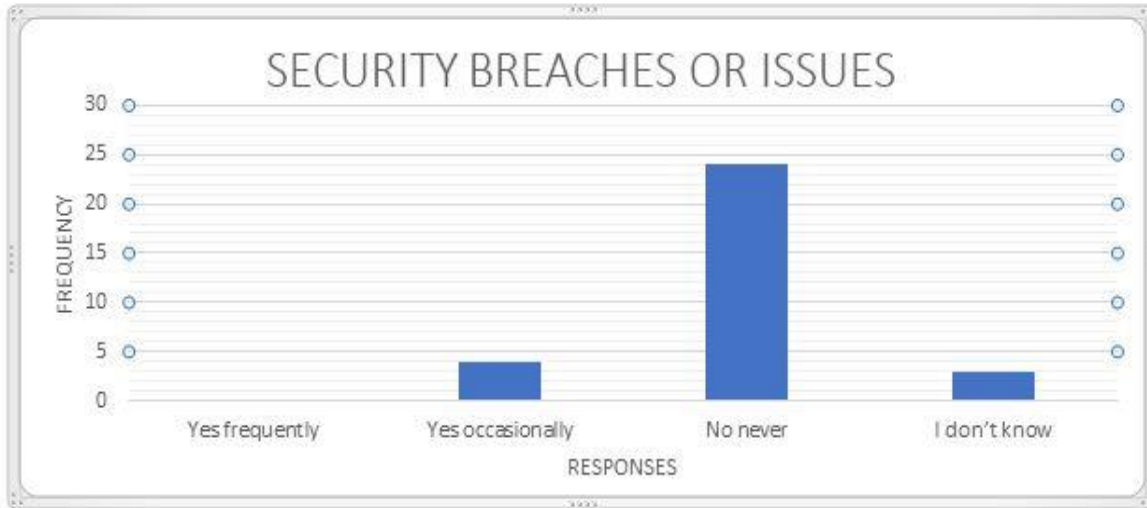


*Source: primary data (2023)*

**FIGURE 3**  
**HOW SATISFIED ARE YOU WITH THE EFFECTIVENESS OF OK GWERU SUPERMARKET'S ACCOUNTING INFORMATION SYSTEM?**

Figure 3 shows that the majority of the respondents are either somewhat satisfied (13) or neutral (7) with the effectiveness of Ok Gweru Supermarket’s accounting information system. A smaller percentage are very satisfied (4) or somewhat dissatisfied (4) while only a few are very dissatisfied (3). This suggests that the company’s system is meeting the basic requirements of workers. However, the fact that a considerable percentage of the participants are somewhat dissatisfied suggests that there may be room for improvement in the systems functionality or ease of use.

**4.4. Security Breaches or Issues**



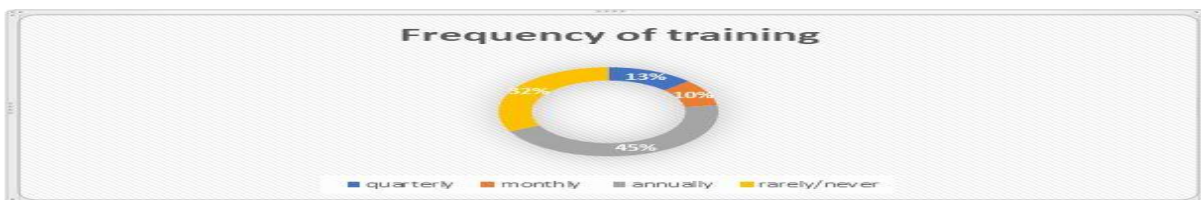
**FIGURE 4**

**HAVE YOU EVER EXPERIENCED ANY SECURITY BREACHES OR ISSUES RELATED TO THE ACCOUNTING INFORMATION SYSTEM AT YOUR WORKPLACE?**

*Source primary data (2023)*

Figure 4 shows that the majority of the respondents (24) have never experienced any security breaches or issues related to the accounting information system at their work place, while a smaller number of respondents (4) have experienced them occasionally. None of the participants have experienced such issues frequently. This suggests that the system is typically secure. However, the fact that a small number of participants have experienced such issues occasionally suggests that there is still a risk of security breaches that need to be addressed.

**4.5. Frequency of training**



**FIGURE 5**

**HOW OFTEN DOES YOUR WORKPLACE PROVIDE TRAINING ON CYBER SECURITY AND HOW TO USE ACCOUNTING INFORMATION SYSTEMS EFFECTIVELY?**

### **Source primary data (2023)**

Figure 5 above shows that a significant number of the participants (14) receive training on cyber security and how to use accounting information systems effectively once a year, while a smaller number of respondents receive such training quarterly (4) or monthly (3). However, a considerable number (10) rarely or never receive such training. This suggests that employers recognize the importance of these topics. However, the fact that considerable number of participants rarely or never receive such training suggests that there might be lack of emphasis on these topics in some workplaces. This finding highlights the importance of ongoing training to ensure that workers are equipped with the knowledge and skills needed to use these systems effectively and securely.

### **4.6 Major Research Findings**

What is the Effectiveness of accounting information system on performance of retail stores?

*The use of AIS has significantly improved the management of financial resources for retail stores, enabling decision-makers to make quick and well-informed decisions. This can result in increased financial performance and profitability for the retail business.*

What is the relationship between application of computerized accounting information system and manual accounting system?

*On the other hand, manual bookkeeping systems are time-consuming and vulnerable to errors. This implies that it would be a wise decision to switch from manual accounting systems to computerized accounting systems in order to improve financial management.*

Why are accounting information systems of retail stores targeted by criminals?

*However, the study also highlights that retail stores are susceptible to financial crimes, and AIS are a primary target for malicious actors. The assessment of OK Gweru Supermarket affirms that accounting information systems have a crucial function in the operational efficiency of retail establishments. Therefore, it is imperative for retail stores to implement robust internal controls and security measures to safeguard their AIS from fraudulent activities.*

What are the challenges faced by retail stores in the adoption of computerized accounting information system?

*Challenges that may arise during the implementation of the system include high implementation costs, lack of technical expertise, and the need for proper integration with existing systems.*

### **5.CONCLUSIONS**

The assessment of OK Gweru Supermarket affirms that accounting information systems (AIS) have a crucial function in the operational efficiency of retail establishments. The utilization of AIS has notably enhanced the management of financial resources, empowering decision-makers to expeditiously make well-informed choices. The transition from manual bookkeeping methods to computerized accounting systems has yielded considerable progress in financial management. Nevertheless, retail stores are susceptible to financial crimes, and AIS are a primary target for malicious actors. Consequently, it is imperative for retail stores to implement robust internal controls and security measures to safeguard their AIS from fraudulent activities. Overall, the advantages of a computerized accounting system are expected to outweigh the difficulties, resulting in better precision, productivity, and decision-making for retail stores

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