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Effects of Accounting Information Systems on Financial Performance of Micro, Small and Medium Enterprises in Kenya

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Abstract: Accounting information systems have been viewed as a game changer in helping MSMEs to avert crises by availing accurate, timely, and sufficient financial information for decision-making. Despite Accounting Information Systems facilitating accountability and transparency to MSMEs, businesses in Homa Bay Town are still facing the challenge of poor record keeping. This study therefore assessed the effects of accounting information systems on the financial performance of Micro- Small and Medium Enterprises in Homa Bay Town, Kenya using primary data collected from 161 MSMESs. The study applied Record Keeping Systems, Financial Reporting Systems, Cash Management Systems and Enterprise Resource Planning Systems as the main measures of accounting information systems. Descriptive and inferential statistics such as multiple regression techniques were used to analyze the data. The regression results showed that record keeping systems had the strongest influence (Beta = 0.329, p = 0.000), followed by Cash Management Systems (Beta = 0.263, p = 0.000), Financial Reporting Systems (Beta = 0.154, p = 0.034), and Enterprise Resource Planning Systems (Beta = 0.165, p = 0.015). Based on the findings, it was recommended that organizations prioritize the improvement of accounting information systems majorly record-keeping systems and cash management systems.

Keywords: Record Keeping; Financial stability; Accounting; Economic development; Business management

JEL Classification: M 41

1. Introduction

Accounting Information Systems (AIS) collect and process financial and accounting information data to assist decision makers (Turner et al., 2020). AIS integrates traditional accounting practices with information technology resources to manage financial data. These systems include the use of computer software to manage financial transactions, generate financial reports, and support decision-making processes (Romney & Steinbart, 2020). Equally, human resources are an integral aspect of the AIS in

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the data entry, processing, and utilization of the output, with the performance of AIS linked to human resources. The evolution of AIS is regarded as an important transition that led to the development of a formal system for measuring, gathering, analyzing, preparing, interpreting, and communicating accounting information (Abed et al., 2023).

However, the existence of AIS does not necessarily imply that organizations will excel at what they do, rather (Parkinson et al., 2015) posit that each context should be guided by its AIS being used. A relevant AIS model should guide MSMEs in their adoption of AIS, as they opine, would involve human resources, a wide range of educational resources, a formal legal requirement to keep the records, an environment that requires informational needs, and supports the growth of MSMEs. Thus, AIS would only be effective if not just adopted as imported, but when it addresses the needs of the targeted MSMEs. Beyond the mere scope of just providing financial information, (Siamak, 2021) opines that AIS has turned out as a significant tool for institutional strategic growth. Therefore, financial performance of SMEs in an emerging economy indicate that firm's growth and survival is dependent on financial performance (Ahinful et al., 2023). Management accounting practices have been associated with financial performance AIS for strategic growth pertains to its function in promoting business strategies that create a flexible corporate culture within a dynamic business environment. Backed up by an internal control system, AIS safeguards against operational inefficiencies, reducing manual errors that would cost an organization time and resources to resolve (Anggraeni et al., 2021). AIS is essential for MSMEs in making decisions regarding operations.

Survival, and growth, especially in the developing economies are low (Nyathi et al., 2018). Accurate financial information is central to the survival of these entities since most MSMEs are forced to close down due to the inability to have accurate and timely accounting records for their informed financial decisions. With proper financial accounting, a business entity stands the chance of maintaining a sound information base for exploring the potential of the business and resource reconfiguration to address the evolving needs of a business (Kuttner et al., 2021). The aspects that make AIS integral for performance enhancement, include an internal control mechanism, information technology infrastructure, and human resource. On these elements, Thuan et al. (2022) opines that, for its function in organizational performance, AIS application is influenced by several factors, including organizational readiness, competitive pressure, manager commitment, compatibility, and government support (Thuan et al., 2022). They further posit that an organization's choice for adopting AIS is informed by the relative advantage of the adoption over non-adoption, and owners' commitment that in implementing the AIS, the risks facing the organization can be reduced.

AIS consists of interconnected components, tasked with collecting, processing, storing, and reporting financial data, which ultimately influences a firm's financial performance. Key components of an AIS include record-keeping systems, financial reporting systems, cash management systems, and Enterprise Resource Planning (ERP) systems. Record-keeping systems ensure accurate documentation of financial transactions, forming the foundation for financial analysis and decision-making (Romney & Steinbart, 2021). Financial reporting systems facilitate the generation of financial statements, important in assessing the company's direction (Bodnar & Hopwood, 2013). Cash management systems are essential for monitoring cash flow, ensuring liquidity, and supporting efficient capital allocation (Hoggett, Edwards & Medlin, 2018). ERP systems bring together business processes to a single framework, enhancing data consistency, and enabling real-time financial analysis, which leads to improved financial

performance (O'Leary, 2000). The integration and effective functioning of these AIS components are vital for ensuring accurate financial reporting, superior decision-making, effective planning, and ultimately, enhanced financial performance.

Essentially, the extent of the accounting information systems and the plan to use them can be effectively predicted by the applicability of the Technology Acceptance Model (T.A.M), which has practical value in facilitating business development and improving financial performance. As put by Davis (1989), the theory of TAM affirms that use of a given system lies on the perceived usefulness and perceived ease of use. This, in turn, influences actual system use. With reference to AIS, the adoption of such technologies can significantly enhance efficiency, accuracy, and decision-making, leading to improved financial outcomes (Venkatesh & Bala, 2008). The model suggests that when users perceive an AIS as easy to use and beneficial, they adopt it in their enterprises, thereby improving overall business performance. TAM's emphasis on user acceptance highlights the importance of designing AIS, thereby driving the successful implementation and utilization of these systems to support business growth.

The MSMEs are sources of economic growth because they are individual productive business establishments of individuals entitle in any economic activity sectors. The MSMEs industry is considered to be one of the most important segments that serve as drivers of economic growth. Majority of the European Union businesses are SMEs, and over 85% of new jobs in the region were associated with SMEs (Gherghina et al., 2020). For these reasons, MSMEs are on the front line due to the market's flexibility and income distribution capabilities and new customer changes. Through their structure, these organizations can conveniently make decisions vital for growth during economic crises. In Kenya, MSMEs undertake important role for employing majority of citizens. According to Central Bank of Kenya (2023), there are more than 7.4 million MSMEs in the country, which have created jobs for approximately 14.4 million people. This employment was reported to account for 33.8% of GDP in 2015. As the National Treasury report indicates, most MSMEs rarely operate beyond their fourth birthday (Central Bank of Kenya, 2023).

Despite the crucial role they play, MSMEs face a myriad of challenges such as higher interest rates with strict collateral requirements, restriction on expansion and innovation capabilities (Sun et al., 2024). Similarly, in South African, SMEs contributes to the GDP by availing job opportunities however, their growth success stand at 50%. Factors such as access to finance due to the complexity and difficulty in accessing finances, lack of technological implementation due to poor infrastructural investment, and lack of managerial competencies due to inability to employ highly skilled personnel (Sitharam & Hoque, 2016). The focus for developing an infrastructure to correct the challenges facing MSMEs cannot be overstated given the inefficiencies facing the organizations. Developing robust AIS has been considered ideal for these business entities for enhancing the efficiency of their operations.

MSMEs are pillars of economic development of many economies, including Kenya. They contribute significantly to employment, GDP, and innovation. Based on Kenya National Bureau of Statistic reports, MSMEs account for nearly 40% of the GDP and secure the services of about 80% of the workforce (Kenya National Bureau of Statistics, 2016). These enterprises are critical in fostering economic growth, reducing poverty, and promoting equitable development. MSMEs operate in environments with low financial inclusion among the members. Their success is important for achieving financial access and inclusion. According to Francis & Williard (2016), these entities are job creators and hold great potential for poverty alleviation and economic growth of resource-scarce regions of the world. Despite the

potential for job creation and economic transformation, most MSMEs in the developing world encounter common challenges related to poor record keeping, low human capital, lack of funding, arduous regulations and high labour expenses, poor service delivery, high competition, and other community-level challenges such as poor infrastructure that derails new technology adoptions. Apart from intra-competition, MSMEs face stiff competition with other dominant actors in their respective industries, necessitating effective adaptive strategies for these entities to address the numerous challenges to their operational efficiency.

Despite their significance in Kenya, majority of the MSMEs are faced with lots of challenges that results in their closure. Thus, they have low survival rate as majority of them shut down in their first years of operations. It is therefore essential to assess how accounting information systems influence the performance of the Kenyan MSMES. However, studies on MSMEs in Kenya have focused attention on the challenges these entities encounter (Parkinson et al., 2015) with little emphasis on the AIS as one of the competitive strategies for evolving and young MSMEs in rural Kenya. The effects of the AIS on the financial performance of MSMEs in Kenya has not been adequately studied. This study therefore aims at assessing the effects of recording keeping, financial reporting systems, cash management systems and enterprise resources planning system on the performance of MSMEs in Homa Bay County, Kenya. The study findings expected to provide a framework for enhancing AIS adoption among MSMEs in other resource-constrained regions in Kenya.

2. Related Work

Chege et al. (2020) assessed the role of ICT as an avenue for enhancing organizational performance. Financial performance is an element of organizational performance, where ICT aids creating innovative ideas for creating new markets, greater interactivity, cheaper interactions, and direct communications with business stakeholders. Their findings reveal that using technology innovation aids SMEs' performance by narrowing the gap between SMEs in developed and developing worlds. Consequently, business performance is reflected in SMEs' managers' understanding of their markets, customers, products and competitors. Suhail (2019) studied how the financial reports' quality affects the listed cement producing company's performance in Pakistan. This study primarily concentrated on the secondary data of the listed companies from 2006-2017. The study discovered that a company with better reporting systems reap the benefit of a high level of performance and sound financial reporting system results to better earning. This study, however, did not look into financial reporting systems' effect on financial performance of MSMEs. Talom &Tengeh (2019) assessed the influence of mobile money payment and receipt services on the financial performance of the SMEs in Cameroon. They used both face-to-face interviews and questionnaire surveys used to collect data from 285 respondents. They also included 12 SMEs owners. They reported a positive relationship between mobile payments and receipt of money services and turnover of SMEs. This study, however, did not look into effects of bank-based systems on financial performance of these MSMEs. Almajali et al. (2022) investigated the ERP success of Jordanian listed companies. The quantitative study approach was employed. Data was collected from 388 CEOs and CIOs using questionnaire method. Only 358 valid responses were analyzed. The finding of this study established that listed companies with ERP systems record strong performance to efficiency. This efficiency enabled the companies to gain a better competitive edge in

that industry. Nevertheless, this study will be pivotal in understanding the effect of ERP system on the financial performance of MSMEs only.

3. Problem Statement

Micro, Small, and Medium Enterprises (MSMEs) contribute approximately 90% of businesses and over 50% of employment worldwide, with Kenya's MSME sector accounting for about 40% of the country's GDP. Despite this significant contribution, studies indicate that over 60% of MSMEs in Kenya fail within the first five years due to poor financial management, weak record-keeping, and limited access to funding. While Accounting Information Systems (AIS) are recognized for improving financial reporting, cash management, and enterprise resource planning, their utilization and impact on MSME financial performance remain underexplored, particularly in resource-constrained settings like Homa Bay Town in Kenya.Existing research has predominantly focused on large enterprises and urban-based MSMEs, overlooking rural and semi-urban businesses that face additional barriers such as inadequate financial inclusion, poor technological infrastructure, and weak transportation networks. Furthermore, previous studies have examined the general adoption of AIS but have not specifically analyzed how its components record-keeping systems, financial reporting, cash management, and enterprise resource planning affect key financial performance metrics such as profitability, liquidity, and solvency in MSMEs. Methodologically, most studies have relied on qualitative or descriptive approaches, limiting the ability to establish empirical relationships between AIS and financial performance. This study seeks to address these issues by evaluating the effect of AIS on the financial performance of MSMEs in Homa Bay Town. The findings will offer data-driven insights to MSME owners, policymakers, and stakeholders, supporting strategic interventions aimed at enhancing financial management, business sustainability, and economic growth in similar resource-limited environments.

4. Conceptual Framework

The study evaluates financial performance in terms of profitability, liquidity, and solvency, using specific financial indicators to assess the impact of Accounting Information Systems (AIS) components on Micro, Small, and Medium Enterprises (MSMEs) in Homa Bay Town. Profitability is measured through net profit margin liquidity, which examines the ability of an enterprise to meet its short-term obligations, is assessed using current ratio while solvency, representing the long-term financial stability of MSMEs, is analyzed through debt-to-equity ratio. These indicators determine the extent to which MSMEs rely on debt financing and their ability to sustain operations in the long run. The study systematically examines how record-keeping systems, financial reporting systems, cash management systems, and enterprise resource planning (ERP) systems influence these financial performance measures. Record-keeping systems are analyzed in relation to profitability, liquidity, and solvency to determine how effective documentation supports financial decision-making. Financial reporting systems are assessed for their role in enhancing transparency, improving liquidity management, and ensuring financial accountability. Cash management systems are evaluated based on their impact on cash flow efficiency and financial sustainability. ERP systems are examined in terms of their contribution to overall financial integration, reporting accuracy, and performance optimization. By linking AIS components to these financial performance indicators, this study provides a comprehensive assessment

of how financial technology influences MSME sustainability. The inclusion of control variables ensures that the findings are robust and account for potential confounding factors, thereby offering empirical evidence to support financial management strategies for MSMEs in resource-constrained environments such as Homa Bay Town.

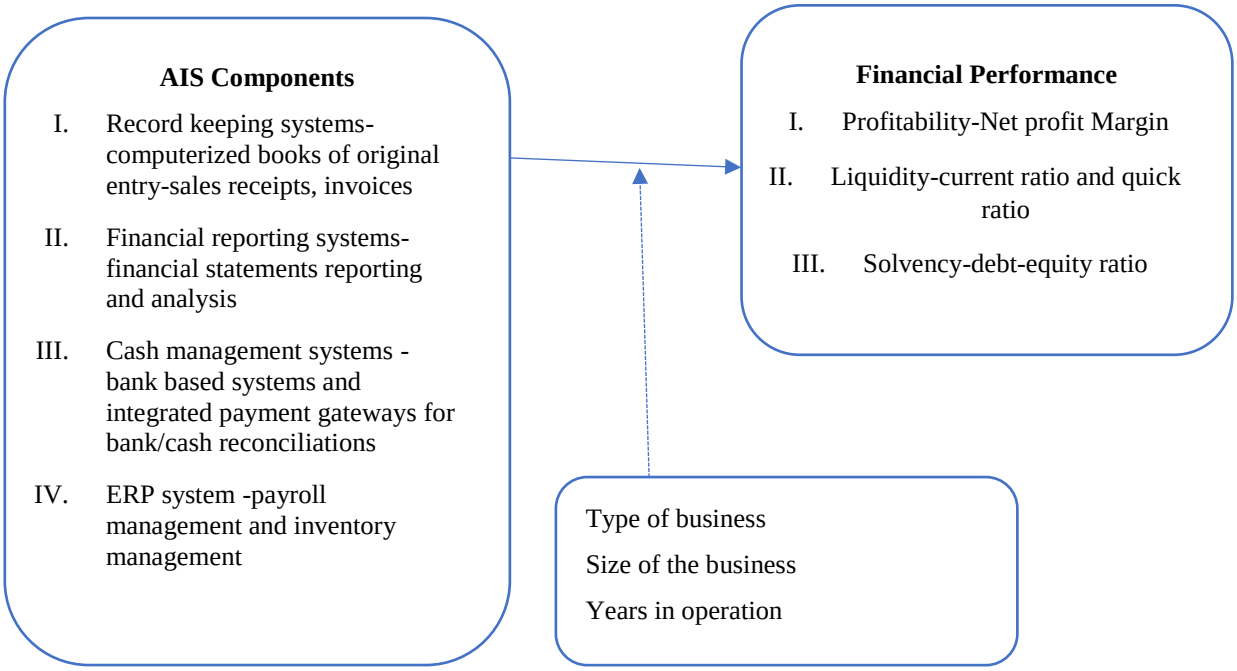

Figure 1. Conceptual framework

5. Methodology

5.1. Study Area

Homa Bay Town in Kenya served as the site of the research. Homa Bay Town is located in the western, Kenya. Homa Bay Town is found within Homa Bay County. It is the biggest Town within Homa Bay County. Homa Bay County prides herself as a County of endless potential located in former Nyanza Province and borders Siaya, Kisumu, Migori and Kisii Counties. The population of Homa bay is 1,113,950 (Census, 2019) with an area of 3,154.7 km^2. It has latitude of 34.33100 E and longitude of 0.62210 S. It is known for its vibrant economic activities including agriculture, fishing, retail, hospitality, transport, technology, pharmaceuticals and various forms of MSMEs. The focus on this area is due to its significant number of MSMEs.

5.2. Research Design

Attributed to its many benefits, a cross-sectional design was adopted in this study. A cross-sectional design was preferred because it allowed for the examination of data collected at a single point in time. Nonetheless, the design was cost friendly and provides accurate results based on the findings from many authors. As such, the study relied on one point in time primary data (Kumar, 2014).

5.3. Target Population

The study targeted MSMEs registered and were in business within Homa Bay Town. The populace for this study was 274 registered MSMEs according to the Department of Trade, Investments, Industry and Cooperatives of Homa Bay County government (County government of Homa Bay, 2020).

5.4. Sampling and Sample Size

In order to have representation across varied types of MSMEs such as those in agriculture, fishing, retail and other services, the study used stratified random sampling technique as shown in Table 1. The stratum was based on the main industry sectors within Homa Bay Town. Within each stratum, SMEs was selected randomly.

Table 1. MSMEs Sample Table Frame per Sector

Sectors	Population	Sample size
Retail super markets and Retail wholesalers	100	70
Hardware	40	20
Hospitality sectors	40	20
Agriculture Sector (Agro vets)	30	15
Pharmaceuticals and health services	20	15
Services sectors (consultancy firms)	20	15
Transport sector	24	6
Total	**274 MSMEs**	**161 MSMEs**

The number of respondents was determined using Cochran's formula. The population of MSMEs in Homa Bay Town registered is 274 (County government of Homa Bay, 2020).

The Cochran's formula is therefore represented as:

$$no = \frac{z^2.p.(1-p)}{e^2}$$

Where Z represents the Z -value from a Z table to be 1.96 at 95% level of confidence, no represents the sample size, Ƥ is the fraction of the population target as percentage that displays the attribute at 50%, while e is the error term at 5%.

$$n = \frac{(1.96*1.96)0.5(1-0.5)}{(0.05*0.05)}$$

= 384 MSME

Therefore; the ideal Sample size (n) is given by:

$$n = \frac{no}{1+\frac{no-1}{N}}$$

$$n = \frac{384}{1+\frac{384-1}{274}}$$

n = 161 MSMEs

Therefore, the sample size was 161 MSMEs.

5.5. Data Collection Procedure

The questionnaire was developed first that suits the MSMEs under review. The questionnaire' items, regarded all the study objectives for this research. This tool was divided into four sections: Demographic Information; Details about the MSME (e.g., size, sector, years in operation, educational background). AIS; Components of AIS including record keeping systems, financial reporting systems, cash management systems and enterprise resource planning system. Financial Performance; Items assessing profitability, liquidity and solvency. Additional Information; Any other relevant data to provide context or additional insights. The effectiveness of the questionnaire was then validated through pilot testing. The training of research assistants on data collection procedures and ethical considerations was done to help them administer the questionnaire effectively. The questionnaire was then administered to sampled 161 MSMEs owners/managers by the researcher with the aid of research assistants. The research assistants also took charge of those respondents who provided responses as they carry on with their duties or those respondents not literate enough to self -administer the research questionnaire. The collected data completeness and accuracy was ensured through follow up visits or calls. The descriptive analytics and inferential statistics were then used to analyse the collected data.

5.6. Data Analysis

A Pearson Correlation Analysis was used to assess the degree of association of AIS and financial performance variables of profitability, liquidity, and solvency. In addition, the multiple regression model was used to determine the effect caused by AIS on financial performance. The model is specified as:

$$Y¡=ßo+ß1\chi1+ß2\chi2+ß3\chi3+ß4\chi4+£$$

Where Y¡= dependent variables set (financial performance indicators (profitability, liquidity and solvency), ßo is the constant term, ß1- ß4 represents the regression coefficients, χ1- χ4 are the independent variables (record keeping, financial reporting, cash management & ERP systems), while £ represents the error term.

6. Results and Discussions

6.1. Demographic Characteristics Respondent

The data regarding the individuals who participated in this study provides useful knowledge into the management of MSMEs in Homa Bay. Comprehending their backgrounds is essential as it aids in elucidating the determinants that promote successfulness of MSMEs in the region. The findings are derived from seven aspects of individuals' businesses: the age of the owners, the nature of the business, the duration of operation, educational background, business condition, annual income, and the utilization of computers within the business. The data indicates that the proportion of micro, small, and medium business owners influences management practices, access to funding, and overall enterprise performance.

Table 2. Demographic Characteristics of the Respondents

Age	**Frequency**	**Percent**
25-35	85	53.8
35-44	59	37.3
45-59	6	3.8
Below 24	8	5.1
Total	**158**	**100.0**
Type of Business	**Frequency**	**Percent**
Agriculture	7	4.4
Fishing	6	3.8
Hospitality	13	8.2
Manufacturing	10	6.3
Other (please specify)	23	14.6
Pharmaceuticals and health services	16	10.1
Retail	30	19.0
Services	30	19.0
Technology	12	7.6
Transport	11	7.0
Total	**158**	**100.0**
Educational Level	**Frequency**	**Percent**
Primary Level	2	1.3
Secondary Level	13	8.2
Tertiary Level	69	43.7
University Level	74	46.8
Total	**158**	**100.0**
Years in operation	**Frequency**	**Percent**
1-3 years	43	27.2
4-6 years	76	48.1
7-10 years	29	18.4
Less than 1 year	2	1.3
More than 10 years	8	5.1
Total	**158**	**100.0**
Annual Revenue	**Frequency**	**Percent**
1,000,001 - 5,000,000	42	26.6
5,000,001 - 10,000,000	22	13.9
500,000 - 1,000,000	43	27.2
Less than 500,000	49	31.0
More than 10,000,000	2	1.3
Total	**158**	**100.0**

Computerized Business	**Frequency**	**Percent**
No	2	1.30
Yes	156	98.7
Total	**158**	**100.0**

Source: Author's Computation, 2024

The demographic data obtained from the survey was analyzed to offer useful knowledge of the characteristics of this study respondents (Table 2). The age distribution of the respondents indicated that the majority, 53.8%, fell within 25 to 35 age range, comprising 85 participants in this category. The second-largest demographic consisted of individuals aged 35 to 44, accounting for 37.3% of the sample with a total of 59 respondents. A smaller proportion, 5.1% (8 respondents), were under the age of 24,

while the remaining 3.8% (6 respondents) were aged between 45 and 59. The data suggests that a considerable number of respondents were in the younger demographic, with a notable segment of the sample aged between 25 and 44. This confirms that young entrepreneurs utilize technology in the operation and management of their businesses to improve growth, financial performance, and sustainability. The survey revealed a diverse array of industries in which the respondents were engaged. Retail and services each represented the largest share, with 19.0% of respondents from each sector, totalling 30 individuals per sector. Various business sectors, including pharmaceuticals and health services, technology, and transport, accounted for smaller proportions, varying from 3.8% (fishing) to 14.6% (other businesses). Agriculture, fishing, and manufacturing were the least represented sectors, with percentages of 4.4%, 3.8%, and 6.3%, respectively. The findings indicated that the survey sample predominantly consisted of participants from the service and retail sectors, encompassing a diverse range of industries, although certain sectors were represented to a lesser extent.

The educational attainment of the respondents indicated that a considerable percentage had achieved higher education. A total of 90.5% of individuals possessed either tertiary or university-level education, with 43.7% having completed tertiary education and 46.8% holding university-level qualifications. A smaller proportion, 8.2%, had completed secondary education, while only 1.3% had attained primary-level education. This underscored the educated background of the respondents, with the majority having attained some level of higher education, which likely enhanced their comprehension and involvement in business operations. The operational data indicated that numerous businesses were relatively new, while also showcasing a significant presence of established firms. The predominant segment, comprising 48.1%, had been in operation for a duration of 4 to 6 years, while 27.2% of respondents indicated that their businesses had been functioning for 1 to 3 years. The remaining businesses functioned for a duration of 7 to 10 years (18.4%) or beyond (5.1%). 1.3% had been in operation for less than one year. The survey results revealed that the respondents were business owners representing enterprises of various ages, with a notable concentration of businesses that had been operational for five to six years. The distribution of respondents by annual revenue revealed that the largest segment, comprising 31.0%, earned less than 500,000. 27.2% reported revenues ranging from 500,000 to 1,000,000, while 26.6% generated revenues between 1,000,001 and 5,000,000. Additionally, 26.5% achieved revenues exceeding 5,000,000, representing the second largest segment. The proportions consisted solely of sizes under 5,000,001 (13.9%), those ranging from 5,000,001 to 10,000,000 (13.9%), and sizes exceeding 10,000,000 (1.3%). This indicates that a significant number of firms generate modest revenues, which aligns with the characteristics of most MSMEs, while a smaller segment exhibits comparatively higher revenues. The survey inquired, and the responses depicted that a significant majority (98.7%) of the businesses had implemented computerized business operation systems. Less than 1.3% of the respondents lacked computerized systems. The findings depict that a majority of the businesses demonstrated technological advancement, with computer-based solutions integrated into their operations, reflecting a significant commitment to digitalization among the surveyed entities. The survey data presented a summary of the respondents' demographics, business characteristics, and operational trends in the final conclusion. The sample primarily included young, educated males operating small businesses within the service and retail sectors, characterized by diverse years of operation and annual revenue levels. A significant number of businesses have embraced computerization, reflecting a robust trend toward the adoption of modern technologies.

6.2. Correlation Analysis

A Pearson Correlation Analysis was used to assess the degree of association of AIS components and financial performance as shown in the Table 3 below.

Table 3. Correlation Analysis between AIS components and financial performance

Correlations

		Financial Performance	Record keeping Systems	Financial Reporting Systems	Cash Management Systems	Enterprise Resource Planning Systems
Financial Performance	Pearson Correlation	1				
Record keeping Systems	Pearson Correlation	0.457**	1			
Financial Reporting Systems	Pearson Correlation	0.395**	0.295**	1		
Cash Management Systems	Pearson Correlation	0.464**	0.246**	0.431**	1	
Enterprise Resource Planning Systems	Pearson Correlation	0.315**	0.109	0.186*	0.326**	1

*** Correlation is significant at the 0.01 level (2-tailed)*

** Correlation is significant at the 0.05 level (2-tailed)*

Source: Author's Computation, 2024

The correlation analysis in Table 3 clarified the extent and direction of the relationships between financial performance and the independent variables: Record Keeping Systems, Financial Reporting Systems, Cash Management Systems, and Enterprise Resource Planning Systems. All factors exhibited positive and significant relationships with financial success; however, the strength of these associations varied. Record Keeping Systems demonstrated a moderate positive correlation with financial performance ($r = 0.457$, $p = 0.000$), indicating that improvements in record-keeping systems were associated with enhanced financial outcomes. This research demonstrated that accurate and methodical record-keeping significantly impacted financial outcomes by enhancing accountability and operational efficiency. Cash Management Systems demonstrated a strong correlation with financial performance ($r = 0.464$, $p = 0.000$), underscoring its essential function in maintaining liquidity, enhancing resource allocation, and ensuring financial stability. This link demonstrates that effective cash management systems are crucial for improving an organization's financial outcomes. The correlation between Financial Reporting Systems and financial performance was moderately positive ($r = 0.395$, $p = 0.000$). This demonstrated that reliable financial reporting improved transparency, supported informed decision-making, and ensured compliance, ultimately benefiting financial performance. Enterprise Resource Planning (ERP) Systems exhibited a weaker, yet still significant, correlation with financial performance ($r = 0.315$, $p = 0.000$).

This suggests that while ERP systems have played a role in enhancing financial performance, their effect is not as pronounced as that of other factors. The results align with earlier studies that pointed out the beneficial link between financial systems and organizational performance. For instance, (Johnson et al., 2019) found that cash management systems had the strongest connection to profitability, which echoes the findings of the current research. Additionally, the work by Brown and White (2020) highlighted the significance of record-keeping systems in boosting financial efficiency, which corresponds with the moderate correlation seen in this analysis.

On the other hand, the weaker correlation between ERP systems and financial performance stands in contrast to the observations made by Lee and Carter (2018), who identified a stronger link in technology-driven industries. This discrepancy may be attributed to the varying levels of ERP system adoption and utilization across different organizational contexts.

The correlation analysis indicated that all independent variables—Record Keeping Systems, Financial Reporting Systems, Cash Management Systems, and Enterprise Resource Planning Systems—exhibited significant positive relationships with financial performance. Among these, cash management systems showed the strongest correlation, followed by record-keeping systems and financial reporting systems. The link with ERP systems was the weakest, though still significant.

These findings underscore the vital role of financial and operational systems in boosting organizational performance. Organizations should focus on investing in cash management and record-keeping systems to enhance their financial results. Future research could explore the underlying factors that drive these correlations and assess other variables that might impact financial performance.

6.3. Regression Results

6.3.1. Model Summary

The regression model below portrayed the effect caused by AIS on financial performance (Table 4). This has been done by carrying out R-square test, determining the significance of the regression model and determining Coefficients of Individual Contributions of each Predictor Variable to the Dependent Variable (Financial Performance). The regression model in Table 4, above showed a correlation coefficient (R) of 0.621, which suggests a moderate positive relationship between the independent variables: Enterprise Resource Planning Systems, Record Keeping Systems, Financial Reporting Systems, and Cash Management Systems, and the dependent variable. The R-Square value of 0.385 indicates that 38.5% of the variance in the dependent variable can be explained by these predictors. This implies that while these systems significantly influence the outcome, a large portion of the variance (61.5%) remains unexplained, hinting at other factors not accounted for in the model.

Table 4. Model Summary of the Study

Model Summary									
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	0.621[a]	0.385	0.369	0.26680	0.385	23.975	4	153	0.000

a. Predictors: (Constant), Enterprise Resource Planning Systems, Record keeping Systems, Financial Reporting Systems, Cash Management Systems

Source: Author's Computation, 2024

The Adjusted R-Square value of 0.369 reflects the number of predictors in the model, showing a slight decrease from the R-Square value. This adjustment indicates that the model is robust against overfitting and that the predictors still serve as reliable elements in explaining the variance. The standard error of the estimate (0.26680) represents the average deviation of the observed values from the predicted values, suggesting that the model achieves a moderate level of predictive accuracy. The change in R-Square (0.385) reinforces the importance of the independent variables in explaining the variance. The F-statistic (23.975) and its associated significance value (p = .000) confirm that the model is statistically significant, indicating that the independent variables together have a substantial impact on the dependent variable. This supports the idea that enterprise systems significantly affect the outcomes achieved. Consistent with earlier research, these results highlight the crucial role that financial and operational systems play in improving business outcomes. A study by Smith et al. (2019) found similar R-Square values, further demonstrating the significant influence of integrated financial systems on effectiveness and decision-making. Johnson & Brown (2020) noted a comparable correlation, indicating that financial reporting systems also contribute meaningfully.

6.4. Effects of Accounting Information Systems on the Financial Performance

The regression results on the effects of Effect of Accounting Information Systems on the financial performance are presented in Table 5. Based on the results, the coefficient for the constant B is 1.137, with a p-value of 0.000. This indicates that, when all predictor variables are held constant, the average financial performance is expected to be both positive and significant. Among the predictors, Record Keeping Systems exhibited the highest standardized coefficient, with a Beta value of 0.329 and a p-value of 0.000. This indicates that it exerted the most significant impact on financial performance. The increase in record-keeping systems from one unit was linked to a 0.256 rise in financial performance, highlighting its importance for improved financial outcomes. Cash Management Systems were ranked second in significance, with a standardized coefficient beta of 263 and a p-value of 0.00. This indicated that effective cash management systems significantly enhanced financial performance, contributing 0.233 units for each unit increase. Enterprise Resource Planning (ERP) systems yielded favourable outcomes; however, cash management systems demonstrated a more significant influence on operational efficiency and financial performance, with B = 0.104, Beta = 165, and p = 0.15. Finally, Financial Reporting Systems demonstrated the least, yet still significant, impact on financial performance with B = 0.120, Beta = 0.154, P = 0.034, attributed to enhancements in accuracy and transparency in reporting.

Table 5. Effect of Accounting Information Systems on the financial performance

Coefficients						
	Model	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	Constant	1.137	0.304		3.745	0.000
	Record Keeping Systems	0.256	0.052	0.329	4.911	0.000
	Financial Reporting Systems	0.120	0.056	0.154	2.137	0.034
	Cash Management Systems	0.233	0.065	0.263	3.574	0.000
	Enterprise Resource Planning Systems	0.104	0.042	0.165	2.456	0.015

a. Dependent Variable: Financial Performance

Source: Author's Computation, 2024

Record Keeping Systems exhibited the highest standardized coefficient, with a Beta value=0.329, t=4.911 and a p-value =0.000. This indicates that it exerted the most significant impact on financial performance. The increase in record-keeping systems from one unit was linked to a 0.256 rise in financial performance, highlighting its importance for improved financial outcomes. Therefore, HO_1 is rejected since the results from table 4.9 showed a very significant relationship between record keeping systems and financial performance of MSMEs in Homabay Town with a Beta value=0.329. This finding supports previous research that has focused on how financial systems perform at the organizational level. For example, Johnson et al. (2019) noted that effective record-keeping systems are vital, directly influencing accountability and better decision-making, as shown by the hyper Beta value in this study.

Financial Reporting Systems demonstrated the least, yet still significant, impact on financial performance with B = 0.120, Beta = 0.154, t=2.137, P = 0.034, attributed to enhancements in accuracy and transparency in reporting. Therefore, HO_2 is rejected since the results from table 4.9 depicted a significant relationship between financial reporting systems and financial performance of MSMEs in Homabay Town with a Beta value= 0.154. This finding is in line with the results of Ravinath (2019) which affirmed that better financial reporting systems leads to a more advanced financial management by SMEs.

Cash Management Systems were ranked second in significance, with a standardized coefficient Beta of 0.263, t value of 3.574 and a p-value of 0.00. This indicated that effective cash management systems significantly enhanced financial performance, contributing 0.233 units for each unit increase. Therefore, HO_3 is rejected since the results from table 4.9 showed a very significant relationship between cash management systems and financial performance of MSMEs in Homabay Town with a Beta = 0. 263.This result is in line with Carter & White (2020) whom emphasized the importance of cash management systems in ensuring liquidity and profitability, a view that aligns with the observations made from table 4.9 above.

Enterprise Resource Planning (ERP) systems yielded favourable outcomes; however, cash management systems demonstrated a more significant influence on operational efficiency and financial performance, with B = 0.104, Beta = 165, t=2.456 and p = 0.15. Therefore, HO_4 is rejected since the results from table 4.9 showed a significant relationship between enterprise resource planning systems and financial performance of MSMEs in Homabay Town with a Beta = 165. This result aligns with the study done by

(Sara, 2020) which found out that ERP systems enhance SME's financial performance by aiding management to make faster decisions.

7. Conclusion

The study reveals that accounting information systems significantly influence the financial performance of MSMEs in Homa Bay Town. Effective record-keeping systems are essential for maintaining accountability and transparency in financial management. MSMEs that adopt robust record-keeping practices are more capable of analysing their financial activities, identifying areas for improvement, and boosting profitability. Financial reporting systems are vital for providing MSMEs with insights that support informed decision-making. These systems help organizations improve strategic planning, optimize resource allocation, and comply with regulatory standards. The ability to generate detailed financial reports enhances credibility and builds trust among stakeholders. Similarly, cash management systems are crucial for the financial stability and sustainability of MSMEs. By implementing sound cash management practices, businesses can maintain liquidity, manage debts, and allocate resources for growth opportunities. Without an effective cash management system, MSMEs face considerable risks related to financial instability and operational challenges. ERP systems offer a transformative approach to enhancing organizational efficiency and competitiveness. By integrating various functions into a single system, ERP eliminates redundancy, streamlines processes, and improves decision-making capabilities. The cost savings and process improvements that an ERP system brings to an MSME are clear and have a direct impact on its financial success. The study highlights the importance of MSMEs prioritizing the adoption of accounting information systems to foster growth and sustainability.

8. Future Work

To improve the financial performance of MSMEs in Homa Bay town, several recommendations are proposed: Owners and managers should seek out and implement suitable, cost-effective accounting systems that meet their specific business needs. Regular training for staff on these systems is crucial to boost efficiency, and establishing clear policies and procedures for systematic record-keeping will help enhance accountability and transparency.

Additionally, it is important for policymakers and regulators to encourage the use of accounting information systems by offering tax incentives to MSMEs that invest in modern AIS technologies, along with other measures to improve financial literacy. Government agencies should also initiate training programs to highlight the advantages of AIS, particularly focusing on the challenges faced by MSMEs.

Moreover, MSMEs should build strong relationships with financial institutions to improve their access to credit for acquiring accounting information systems. Microfinance institutions and banks can develop credit products tailored to support MSMEs in their digitalization efforts. These financial institutions should also offer advisory services to help MSMEs choose and implement the right accounting information system solutions.

Finally, technology developers need to create ERP solutions that are both affordable and scalable, addressing the unique needs of MSMEs. Providing technical support and training is essential for the

effective use and adaptation of these systems. Collaboration among technology developers, MSMEs, and various stakeholders can drive innovation and improve access to AIS technologies.

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