"Usefulness of accounting information systems for small business profitability in South Africa: A systematic literature review"

AUTHORS	Kansilembo Freddy Aliamutu Msizi Vitalis Mkhize

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Kansilembo Freddy Aliamutu (South Africa), **Msizi Vitalis Mkhize** (South Africa)

USEFULNESS OF ACCOUNTING INFORMATION SYSTEMS FOR SMALL BUSINESS PROFITABILITY IN SOUTH AFRICA: A SYSTEMATIC LITERATURE REVIEW

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Kansilembo Freddy Aliamutu, Ph.D. Student, Faculty of Accounting, Economics and Finance, Department of Accounting, University of KwaZulu-Natal, South Africa. (Corresponding author)

Msizi Vitalis Mkhize, Ph.D., Professor, Faculty of Accounting, Economics and Finance, Department of Accounting, University of KwaZulu-Natal, South Africa.

Abstract

Accounting information systems are an important instrument in the hands of administrators seeking to maintain a competitive edge in the face of fast technological innovation, having the knowledge, and demanding expectations from customers and business owners. The objective of the study is to investigate the empirical literature pertaining to accounting information systems and companies. This study uses a systematic literature review method to provide responses to the research issue, and the bulk of the research was conducted in industrialized economies where computerized accounting system approaches were widely adopted. The selected method of inquiry consists of the following phases: study choice, development of both inclusion and exclusion guidelines, research designation, quality of research assessment, data collection, and data compilation. Based on the paper's findings, most small businesses fail to implement accounting information systems in their operations, resulting in low-efficiency levels because of the difficulty of preserving company information records. Furthermore, this systematic literature review adds to the prior literature in three ways: (1) it indicates the usefulness of accounting information systems; (2) it expresses the suggestions that might be implemented to boost the accounting information system; and (3) it describes the research gaps that require to be filled to encourage an improved adoption of accounting information systems for small business profitability.

Keywords accounting information system, information system, small business and profitability

JEL Classification M49, L86

INTRODUCTION

The ever-increasing requirement for corporate communications, expansion, and growth in the new information business environment has compelled administrators to embrace more sophisticated management tactics aimed at improving the company's profitability (Gofwan, 2022). Most of these tactics are geared towards maintaining enterprises in the face of rapid technological developments, having the knowledge, and demanding clients' needs. The use of computer systems in commercial organizations is, however, one strategy (Beg, 2018). Al-Fatlawi et al. (2021) define the information process as the organization of both physical and logical entities, data, procedures, rules, conventions, professional skills, equipment, technology, duties, and some other organizational capacities. Bahar and Ismaya (2022) claimed that an information system is one that offers critical information for the organizing, guiding, managing, and controlling of operations inside a system to achieve better decisions.

The managerial information process (MIP), processing system for transactions (PST), workplace manufacturing process (WMP), a sys-

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tem to support decisions (SSD), management information (MI), intelligent systems (IS), and accounting information system (AIS) are examples of accounting information systems (AIS) (Beg, 2018).

Kusmuriyanto et al. (2023) propose additional information processes such as dosage forms (DS), systems for enterprise resource planning (SERP), procurement processes (PP), and knowledge-intensive processes (KIP). The accounting information process (AIP), like any other information system, is thought to have an important function within the administration of regular operations in businesses. We then suggest a wide scope of studies for the future. This is the first research to undertake a systematic literature review in this way. The findings of this study illustrate the usefulness of accounting information systems on company profitability and highlight that the structure may be enhanced in a variety of ways to increase its achievement. Furthermore, the study reveals that the implementation of a review of the usefulness of accounting information systems in a company has certain unexplored spots that require exploration.

1. LITERATURE REVIEW

This section discussed the overall literature review of the Accounting Information System and explained its components. Derila et al. (2020) claimed that the information systems for accounting have been accepted as part of the supplementary information systems utilized to carry out duties of management such as organizing, arranging, and regulating, as well as preference to maximize how to make use of what is available. Galdeano et al. (2019) mentioned that the accounting information system is a formalized process for determining, evaluating, aggregating, assessing, summarizing, and analyzing, while transferring accounting data regarding a particular business to a related category. Al-Fatlawi et al. (2021) mentioned that the accounting information system implies a gathering of assets (individuals as well as technological advances) which are meant to collect information about accounting to offer the information necessary depending on the preference at the moment in time. Every company needs accounting information systems to be successful.

Gofwan (2022) claimed that the Accounting Information System is intended for use in the management and collection of information, secondary data, or normal data, and its transformation into accounting transactions for the appearance of policymakers. The Straightforward Recognition Procedure (SRP) remains a process that helps in the acquisition and preservation of information as well as data concerning incidents that have a financial impact on businesses (Ha, 2020). It further helps with conservation and analysis, as well as the transmission of its information to stakeholders both inside and outside the organization (Hapsoro & Sulistyarini, 2019). AIS substantially helps with the supply of both inside and outside submitted information, financial statements, or structural data analysis, which affects managerial profitability. As previously stated, it is anticipated that the accounting information system will become related to the financing nation as well as the outcomes of companies (Harjito et al., 2022). Hidayah and Khasanah (2022) mentioned that profitability is a synthesis of a company's budgetary well-being, capacity, and readiness to fulfill lengthy financial commitments and obligations and can provide assistance in the near term.

Profitability, in a broader sense, means the extent to which commercial objectives are accomplished. Khalid and Kot (2021) claimed that their advisors in finance relied on the bookkeeping and accounting information offered by AIS to evaluate a firm's previous performance and get ready for the years to come. The outcomes of AIS, especially the financial reports, are needed at multiple management levels as well as from other customers. The results of an AIS, in turn, flow into various decision channels at the functional, strategic, and conceptual organizational levels (Meeks & Swann, 2009). Users require economic and associated data with varying amounts of information and evaluation. Monteiro et al. (2022) found that accounting information systems, being desktop tools, come with innovative and current accounting procedures that many business shareholders, particularly those from nations that are developing, have been unprepared to implement or consider chal-

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lenging to put into effect. Yet, firms are developing more and more complicated accounting information systems to satisfy corporate objectives and improve productivity (Viskari et al., 2011).

Ahmad and Al-Shbiel (2019) highlighted that small businesses in developing nations commonly face issues that include a total absence of funding and technological decrepitude, a shortage of financial and information processes, limited capacity utilization and senior management IT-oriented behavior, and a lack of resources to develop skills. It particularly seeks to record empirical findings on the accounting information system as well as to highlight research gaps linked to the effect of accounting information systems on company profitability as the basis for subsequent empirical research (Al-Fatlawi et al., 2021). Brau et al. (2008) evaluate the influence of AIS on the profitability of a sample of small Jordanian commercial property enterprises.

A comprehensive survey was utilized to obtain information regarding personnel at designated commercial property businesses, including Noor Investments and Jordan International Property Corporation. The investigators issued 250 surveys, 75 of which received no response and 175 were granted permission for study. To assess the obtained data, the study used the method of linear regression analysis. According to the study's findings, locations had no impact from AIS. Jordan's International Investment Corporation of Jordan gained the most from AIS. Kusmuriyanto et al. (2023) look at how accounting information systems affect the financial and non-financial side of small Nigerian businesses. Investigators received both quantitative and qualitative information across 16 firms. Between 2011 and 2014, data were gathered using surveys as well as the Nigerian Stock Exchange (NSE). Statistical software for social sciences (SPSS) and several linear regression techniques are used to analyze the gathered data. According to this empirical study, accounting information systems had a considerable favorable influence on the financial and non-financial measuring indicators of Nigerian enterprises. Collier (2015) evaluates the impact of accounting information systems on the profitability of selected small Jordanian commercial real estate firms. The research used a questionnaire-based method and collected data using surveys compared to 175 workers in five Jordanian organizations. To assess the provided data, this study applies linear regression statistics.

The results revealed how accounting information systems enjoyed a significant impact on the profitability of all organizations within the assessment. Deyganto and Alemu (2019) assess the profitability chosen by FMCG small companies in India employing an accounting information system. The research applied a questionnaire-based approach involving 400 respondents, and the responses were obtained from 177 completed available surveys. The data were examined using basic linear regression analysis, and assumptions were validated with 95% confidence. The study's findings indicated how accounting information systems had a substantial influence on the profitability of the chosen Indian FMCG firm. Dirman (2020) examines how accounting information systems affect small business productivity. The research effort obtained information from 137 Saudi small-sized enterprises (SEs) via surveys and used intelligent partial least-squares analysis to evaluate the information and test the research assumptions. The findings of this study have shown utilizing an AIS possesses a considerable influence on an organization's overall success and all its parameters, namely savings in costs, enhancement of excellence, as well as efficient choice making. Endiana et al. (2020) look at how accounting information systems affect the profitability of chosen Jordanian small businesses. The study used self-administered surveys to collect information from 206 Jordanian bank employees in the form of a questionnaire.

The research used the method of linear regression to examine the information obtained. The results show that, in terms of assessment, accounting information systems have a major influence on small business profitability. Esmeray (2016) investigates how the implementation of AIS affects the financial condition of Nigerian financial institutions. The research used a descriptive polling approach, with information gathered through surveys distributed at random to 80 participants representing 16 financial institutions. Secondary data from the selected banks' annual reports were utilized in the study as well. In the ten years since the installation of AIS (2008–2018), information on returns on capital equity (ROCE), returns on total assets (ROTA), net operating profit (NOP), and gross profit margin (GPM) has been acquired. Regression analysis was used to determine if the adoption of AIS had a significant influence on bank profitability. The results indicated that financial institutions in Nigeria embraced and employed AIS to deliver goods to its consumers, with an acceptable degree of adoption. The research revealed that the use of AIS had an important beneficial correlation with all profitability metrics (ROCE, ROTA, GPM, and NOP). Gibbons et al. (2020) studied the influence of AIS on Jordanian small private bank profitability. A research design based on surveys was used in the research process. The research gathered information from 112 surveys distributed to Jordanian small private banking workers.

To address the study's hypotheses, correlation and multiple regression analyses were used. The findings have shown that accounting information systems have a significant influence on small financial institutions' profitability. Gichaaga (2014) investigate the effects of accounting information systems on small company profitability. The research used a qualitative data-gathering strategy and evaluated prior relevant publications. The research also made use of secondary data to get reliable results that relied on empirical evidence. The results of the study demonstrated that when checks are handled successfully and efficiently, profitability improves, accounting information dependability improves, and making choices improves for individuals and organizations. Gofwan (2022) assesses the effects of accounting information systems on staff productivity and organizational efficiency. The data obtained from 74 SMEs were evaluated using a questionnaire research technique. The research's data were evaluated utilizing regression analysis.

The results of the study showed that accounting managerial expertise and top management support have an important effect on a company's AIS, as well as that AIS has an important influence on the company's performance oversight and organizational effectiveness. Ha (2020) assesses the influence of computerized accounting information systems on managerial efficiency in the government of Nigeria. The investigation used a design that was exploratory. Additional information sources were employed to get data. The implications of computerized accounting information systems (CAIS) on executive officers employed by Nigerian departments, ministries, or organizations in terms of accounting frameworks and operational procedures have been studied. The paper cites several of the challenges associated with CAIS adoption, such as high implementation and hardware costs and system maintenance costs, along with the requirement for specialized abilities. Additional issues involve a decrease in employees' poor safety, as well as a shortage of excellent storage and equipment for printing.

The study also emphasized the benefits of implementing CAIS, such as reduced operating expenses, higher productivity, expanded efficiency, enhanced external communication, improved precision, and quicker information processing in the program. Hammitt et al. (2022) examine the effect of Procter & Gamble's financial information system on organizational effectiveness. In the research, a descriptive survey methodology was employed. Surveys utilizing a five-point Likert scale were used to gather the data. The study takes 174 P&G Limited employees as a sample. With linear regression, the statistical assessment strategy was straightforward. The efficacy of advertising, followed by employment results, was revealed to be the AIS component with the most impact. Profitability had a little impact, though. According to the study, P&G Limited's organizational success is significantly influenced by its accounting information system. Hapsoro and Sulistyarini (2019) examine the role of accounting information systems (AIS) in meeting management and financial performance goals. The investigation used a questionnaire-based approach and collected data from 38 randomly selected staff from several private and small medical facilities in the United Arab Emirates.

To examine the data collected for the study, mean and standard deviation statistics are used. Using a t-test and one sample statistic, the study hypotheses were evaluated. The study's findings showed that accounting information systems at private and small medical facilities in the United Arab Emirates provide data that is tailored to the department's demands for profitability. Harjito et al. (2022) look at how Nigerian small banks performed after using computerized accounting methods. The research obtained an average numbering of 50 compared

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to three Nigerian money transfer organizations employing a convenience sampling procedure and a questionnaire method. The data acquired for the investigation was evaluated using correlation analysis. According to the evidence, the computerized accounting system boosts bank profitability in addition to customer satisfaction. Hashem and Alqatamin (2021) conducted a research study on the influence of information technology on accounting systems and organizational effectiveness. This analysis made use of both primary and secondary data. The core data for the study came from questionnaires distributed to 20 workers from Covenant University Nigeria's finance division and other relevant accounting departments.

Pearson's correlation was utilized to evaluate the data. The results revealed a considerable positive association between the ICT system and the accounting system, as well as a substantial beneficial connection between the ICT system and organizational effectiveness. Hermawan and Gunardi (2019) study the impact of accounting information systems on company outcomes. The inquiry was conducted using a descriptive survey research method. The research data were acquired through contacts with 60 small-scale firms. The data were examined using generalized least squares. The data indicate that there is a negative and not statistically significant association between management's usage of AIS and their educational level. Hill et al. (2010) study the effectiveness of accounting information systems and the influence they have on the everyday tasks of Jordan's publicly traded small industrial firms. The sample for the research included 42 Jordanian firms from a variety of industries that were listed on the Amman Stock Exchange (ASE) at the end of 2012. Based on the data, the AISs deployed in places of employment were beneficial, especially in meeting expected demands.

The data also demonstrated that managers' personal perspectives affected the bulk of corporate decisions, which were communicated by the group of executives shaped by such notions. Hutahayan (2020) examines the influence of information systems on accounting for successful determinants of organizational performance. As efficacy predictor factors in the current analysis, four types of AIS successful characteristics – service excellence, details dependability, accuracy of data, and system quality – were employed. 273 small Jordanian private financial institution interviewees provided information using a structured questionnaire. The collected data were examined using the PLSSEM method. The results show that the most crucial AIS successful components for increasing organizational efficiency are the quality of services, the quality of information, and the system dependability, accuracy of data, and system quality. 273 small Jordanian private financial institution interviewees provided information using a structured questionnaire. The collected data were examined using the PLSSEM method. The results show that the most crucial AIS successful components for increasing organizational efficiency are the quality of services, the quality of information, and the system's dependability. The paper claims that by incorporating and using AIS's successful qualities, small private banking industry companies may increase their efficiency. Islam et al. (2012) investigate the efficacy, profitability, and effectiveness of SMEs in Iran in connection to the installation of accounting information systems. A descriptive survey approach was used in this investigation. Data were given by 118 small-sized businesses (SSBs) registered on the Tehran Stock Exchange between 2008 and 2013. Surveys were utilized to gather data.

The results of the study demonstrated a link between improved productivity, efficacy, and profitability (as gauged by the P/E ratio and Tobin's Q), and ordinary least squares (OLS) regression was used to assess the data. The successful implementation of AIS in SEs is listed on the Tehran Stock Exchange. Jahari et al. (2017) conducted an empirical study to examine the relationship between the achievement of small-sized firms and the conformance of accounting information systems (AIS). In the study, secondary data from books and journals were employed. The evaluation's findings indicate that organizational characteristics, individual characteristics, and contextual variables that have an influence on SEs' productivity also have an impact on AIS congruence. Kafuku and Mbarawa (2010) investigated how accounting information systems affected performance measures. The research took a qualitative strategy, depending exclusively on secondary data. The capacity of organizations to build and use computerized systems that monitor and document financial activities in enabling decision-making by management, internal auditing, and financial statement quality was shown to have the greatest influence on accountancy. Khaghaany et al. (2019) study the impact of AIS on the profitability of small businesses. The study solely utilized secondary data and employed a qualitative inquiry technique. The findings of an earlier study indicated a significant positive relationship between small organizations' profitability and their accounting information systems.

The research found that the efficiency of accounting information systems helps executives to arrive at better choices, establish stronger internal control systems, improve the accuracy of accounting states, enhance efficiency regulations allowing financial transaction procedures, and increase the financial viability of the company. Kopparthi and Kagabo (2012) investigate how accounting information systems affect financial outcomes. To gather information from 40 small top tuckshops in India, the study employed an exploratory methodology. Statistical software for social sciences (SPSS) was utilized to examine the collected data, and one-sample t-test statistics were applied to assess the recommendations. The findings showed a not significant relationship between accounting information systems and management's and accountants' comprehension and approval of decision-making, profitability, and organizational capabilities. The study found a weak correlation between directors' and∈ accountants' understanding and ability to make decisions, profitability, and the wealth of small top tuckshop businesses. In considering this, a systematic literature review is performed that concentrates on a comprehensive review of the usefulness of accounting information systems on the profitability of companies and recommendations that may be implemented to increase the system's adoption. The objective of the study is to look at the empirical literature pertaining to accounting information systems and companies.

2. METHODOLOGY

Tranfield, Denver, and Smart developed a systematic literature review method in 2003, which Hansen and Schaltegger (2016) subsequently adapted to address the following research question: What is the value of accounting information systems in terms of company profitability? The selected method of inquiry consists of six phases:

1) study choice;
2) development of both inclusion and exclusion guidelines;
3) research designation;
4) quality of research assessment;
5) data collection; and
6) data compilation.

A systematic literature review examines the current research with an extra systematic and thorough approach, producing real and trustworthy information while reducing prejudice (Schaltegger et al., 2016). To improve the quality of this systematic literature review, researchers follow Fisch and Block's (2018) guidelines for performing a systematic literature review in business and managerial studies:

1) inspire the issue and state the research question;
2) carefully pick relevant literature;
3) strike the proper balance between richness and width;
4) focus on concepts rather than research;
5) develop significant findings; and
6) adhere to an understandable paper format.

Furthermore, the study follows three additional recommendations made by Gee et al. (2021) for conducting a systematic literature review of business and managerial studies:

1) use a current study group strategy for communication;
2) limit prejudice at every stage; and
3) defer judgements and depend on the procedure itself.

This research project was a team effort because using more than one research evaluator is important

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to improve the study's reliability (Gee et al., 2021). The main researcher directed the procedure to increase the consistency and accuracy of the current assessment and to motivate the team conducting the study, as advised by Gee et al. (2021). The lead researcher arranged meetings and recorded notes for all studies reviewed throughout the meetings to make sure the process moved well.

3. RESULTS

Researchers met on Microsoft Teams for roughly sixty minutes every week for a couple of weeks. Several issues were discussed at these meetings, including inclusion and exclusion criteria, methodology, and significant ideas from all studies, which assisted researchers in developing a dependable level of understanding as the research team. Appropriate keywords were identified (step 1) based on the formulated research question to cover the research area in its totality. These keywords included: "accounting information system," "information system," and "profitability." Phrases for searches were created based on these keywords to find associated research. The present study conducted a test run to improve search phrases where necessary. The first six research papers found through the search on Google were randomly allocated to pairs of teammates for examination as an exploratory study. The results of the pilot test were discussed and then the search phrases were modified appropriately. Papers were gathered through Google Scholar, ScienceDirect, and ResearchGate that might answer the study's topic.

In addition, researchers reviewed lists of references and give-search publications to gather more research. Weiss and Kanbach (2022) proposed that while exploring the literature, it would be beneficial to obtain research from many different databases. The difficulty of triangulation was solved by combining research from various databases because the greater the number of databases, the more accurate the results. Researchers chose the databases that were indicated below since they contain much research and are regarded as a few of the finest and most comprehensive databases of peer-reviewed research in the entire globe. Only research projects taken from these databases are assessed to ensure the uniformity, reproducibility, reliability, and quality of the study effort (Pertusa-Ortega et al., 2021). Pooling research from many databases reduces database or origin prejudice and eliminates geographical bias by reviewing research across all sides of the world (Tarba et al., 2020). Researchers retrieved research between all databases for a period of fifteen days, starting March 2nd to March 16th, 2023. The resulting searches were evaluated on Google Scholar before being used in additional databases.

Researchers examined a list of references to the relevant reviewed research (using a snowballing method) to ensure adequate coverage and to identify a feasible lack of research studies to be encompassed in the preliminary sample, augmented by a forward-looking reference verification on Google Scholar to track where these research findings appear after that (Simsek, 2009). In addition, researchers palm-searched certain publications to find papers that were missing from the list of references and searches of databases (Nosella et al., 2012). Three presumably relevant articles were chosen out of two give-search periodicals, namely the South African Journal of Economics and Management Sciences and the Journal of Economic and Financial Sciences. The entire research method gathered thirty-nine studies for inclusion in the preliminary sample. The criteria for inclusion and exclusion were set in such a manner that any pertinent research may be included (step 2).

This evaluation includes mainly English-language studies that investigated the efficiency of South African rescue companies' processes. Researchers included only English research because of a lack of funds for translation services and to make the evaluated literature accessible to a global English-speaking audience. The research looked at publications released between 2008 and 2023. Researchers began working on this post in the year 2023, which is the final month of the year. Several studies were chosen as part of the research approach. A few of the studies chosen seemed appropriate for the research, while others were not. Each researcher (step 3) identified appropriate research. The titles, as well as the abstracts of the papers, were evaluated first while verifying them. This was carried out to avoid squandering funds on research that did not match the necessary inclusion requirements (Úbeda-García et al., 2020).

While using a data extraction worksheet for the abstract and title suitability screening, researchers prepared from before tested and made changes as needed. When the assessment of the title and abstract failed to provide a clear decision concerning whether to decline or approve the research paper for assessment, the beginning and/or conclusion were examined.

Furthermore, when the review of a research's beginning along with conclusions had been insufficient, the whole research was assessed to decide its inclusion in the evaluation. To increase the validity of the study results, the researchers intended to analyze only peer-reviewed journal articles (step 4). Peer-reviewed papers are seen to be excellent, with an appropriate contribution (Karrer & Fleck, 2015). However, because of the scarcity of articles from peer-reviewed publications, researchers concluded that these included educational dissertations, such as master's and doctoral theses.

Included dissertations ensure an "equilibrium among complexity and scope" (Raisch et al., 2009). By incorporating scholarly dissertations, researchers could grasp fresh, developing concepts in scholarly discourses about the South African rescue of corporation's framework. Without academic research papers, the final sample of investigations might have been too small to ensure sensible analysis. Furthermore, such dissertations allowed us to broaden the sort of literature included in this review. Following the first interviewing procedure (titles and summary checks), researchers obtained every reference that was acceptable for full-text analysis. However, efforts were taken to contact the researchers and/or their universities and journals to get these papers. After removing irrelevant and duplicated research, only twenty-two studies remained in the final sample and were examined and assessed. Figure 1 depicts a flowchart of the study choice procedure.

A combined data extraction sheet (step 5) was generated to verify the suitability of the investigations and capitalize on their characteristics. This included information such as the author(s), year of publication, research title, research aim, sample, research design, method(s) used, and study outcomes. Prior to implementation, the study's team checked and adjusted the starting point as necessary. The authors evaluated the acceptability of full-text research and noted its characteristics. Each study was carefully examined by a two-person team of researchers to ensure strong and unbiased conclusions. A list of papers to be reviewed was compiled, and the primary investigator assigned these investigations to a person who rotated on a regular schedule, minimizing bias caused by repeatedly examining the same research simultaneously. By having different individuals review the work, researchers prevented the injection of bias into the research rating process.

Researchers also made complementary comments on important facts and ideas to preserve all essential data. These observations helped us develop the final dissertation. Sometimes, researchers disagreed on research inclusion, leading to lengthy debates. However, these discussions were beneficial, as they helped the study's team better understand the processes and methods used for

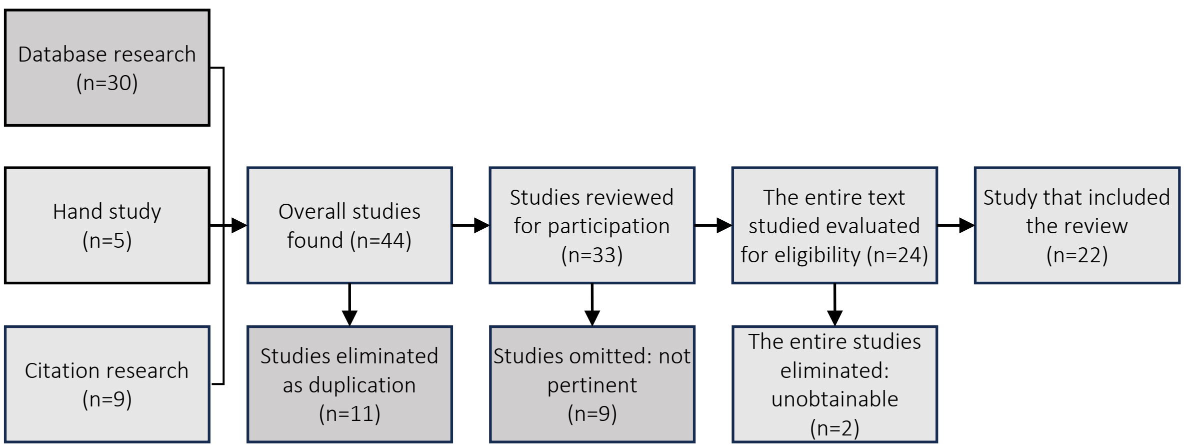

Figure 1. Flowchart of the study

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systematic reviews. Without these discussions among multiple individuals, the assessment may not have proceeded in the same way. Working as a team helped the authors reduce the time required to complete our systematic review analysis, and our conversations provided a platform for raising concerns and seeking clarity on issues (Gee et al., 2021). Completed research was evaluated, and a final determination of its suitability for inclusion in the evaluation was made. Any research that did not meet the eligibility criteria was discarded at this point. Finally, data summary and evaluation (step 6) were carried out using a data-obtaining table, chart, and graph. This article used an explanatory-analytical approach to explain the adoption of the accounting information system and identify research gaps in the existing literature. Findings are occasionally supported with quotations from the reviewed research, and a thorough literature review supports the discussions.

In this research, the method and findings were observed after reviewing all the literature, and each investigator was allowed to conduct research independently (Gee et al., 2021). Researchers avoided making premature assumptions based on insufficient details. In addition, researchers made sure not to let a single robust study dominate the discussions (Gee et al., 2021). After removing irrelevant and redundant research, relevant papers were included in the final sample and reviewed in the literature review section. The twenty-two papers included in this review are all qualitative in nature, which is expected in a relatively new study subject. Surprisingly, most of the research in the final sample provided primary, original data, although some studies relied on secondary data. Table 1 shows the distribution of the selected papers by publication. 64% (15/22) of the papers reviewed were journal articles, 30% (5/22) were master's dissertations, and 6% (2/22) were doctoral dissertations.

The overall number of evaluated publications for every year from 2008 to 2023 is shown in the study's year of published assessment (see Figure 2).

Figure 2 shows the number of assessed papers published each year. As expected, the analysis of publishing years reveals that the field of accounting information systems and company profitability is relatively new and expanding. Consequently, there is a continuous flow of research literature in this area. In fact, 69% of the research papers were published in the last five years, even though the data were collected from 2008 to 2023. According to the findings of these papers, most small businesses do not implement accounting information systems, leading to low-efficiency levels due to the challenges of preserving company information records. In addition, small businesses face difficulties in anticipating fluctuations in consumer

Table 1. Classification of studies considered

Papers have been reviewed as journal articles	Master's dissertations	Doctorate dissertations	Overall
64%	30%	6%	100%
15	5	2	22

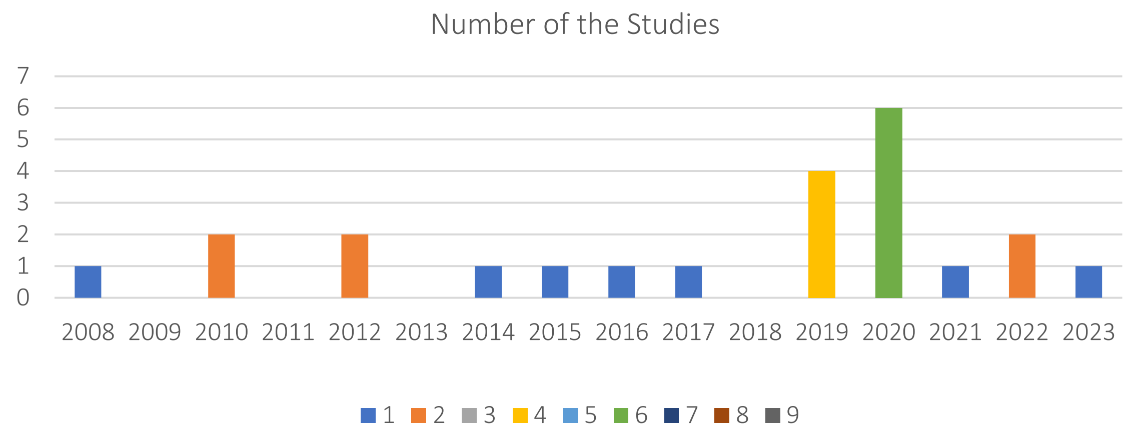

Figure 2. Studies reviewed from 2008 to 2023

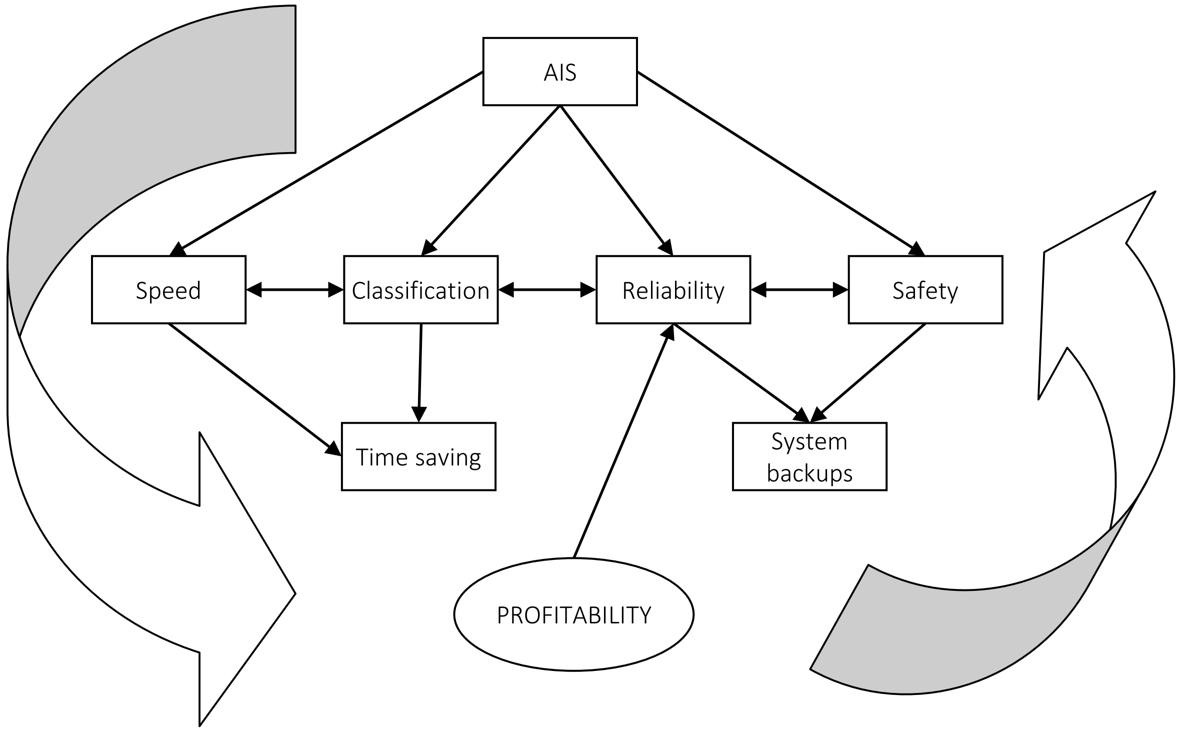

Figure 3. Study model of AIS

demand or changes in client preferences, which makes it hard for management to predict and address these issues. Moreover, it is extremely challenging for small businesses to adopt decision-oriented information structures that can assist them in making informed choices for the company. The use of "what if" systems, however, has proven to be beneficial in enabling quick and effective completion of tasks and managing large amounts of data.

Accounting information systems (AIS) have been proven to directly impact the profitability of small enterprises by expediting information processing. This more efficient data sorting leads to time savings. Additionally, the system is noted for its stability and security, as backups are consistently available and can be retrieved whenever necessary. Furthermore, the implementation of accounting information systems in small enterprises results in both short-term and long-term earnings, ensuring their continued existence. According to research, typical costing methods and financial inventory models do not effectively function in small businesses. Research findings indicate that profitability is the most feasible measure of return on investment for a firm. This is assessed in terms of market share acquired during a specific time period. Furthermore, profitability ratios, such as return on sales or profit margins, are used by companies to determine profit ratios on revenue. Unfortunately, due to a lack of professional expertise, small companies often disregard these profitability ratios. Moreover, small companies face challenges in comparing their efficiency to that of other organizations to determine their competitiveness. The findings also suggest that small firms struggle to secure the necessary resources or finances to list their organizations on the stock exchange. Many small enterprises fail to comply with government regulations, making it difficult to track their legal activities on the company's platforms. Furthermore, the findings indicate that obtaining merchandise cost data for every payment made by small enterprises can be challenging. It was also highlighted that most business expenditures are often undocumented, and management decisions are made based on consumer responses, opinions, and market factors, ultimately determining the profit level.

4. DISCUSSION

It has been discovered that small businesses do not use accounting information systems in their operations, which has resulted in reduced profitability due to a lack of company-specific documentation main-

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tenance (Bahar & Ismaya, 2022). Dirman (2020) claimed that many small businesses realize over time that their enterprises are not functioning effectively and ultimately decide to shut down operations due to the absence of proper business documentation Business-related records are only reliable and secure when adequate evidence is backed up in the event of data loss. However, small businesses either lack documentation or are unable to effectively preserve it for future use. Furthermore, the absence of an accounting information system (AIS) leads to an inability to effectively foresee or identify concerns such as changes in customer preferences or shifts in market demands (Nguyen et al., 2021). Recognizing these variations and understanding consumer behavior can add value to products or services and potentially lead to diversification or a shift to a different business model that generates greater revenues. In addition, small businesses struggle to implement systems that convert data into decision-oriented structures that can help make informed business choices. For example, the use of "what if" scenarios and software for accounting can facilitate efficient task completion and aid in managing large workforces (Hashem & Alqatamin, 2021). Implementing these systems can help meet client deadlines and minimize business damage caused by a high volume of customer requests. It is crucial for businesses to have a strategy that increases sales and profitability. Utilizing inventory management methods such as "first in, first out" (FIFO), "last in, first out" (LIFO), and weighted averages can help small businesses lower the cost of stocks (Ali et al., 2021). These approaches are important for preventing losses and increasing earnings. However, many small firms fail to adopt these practices, leading to detrimental consequences. Profitability ratios, such as return on sales, return on assets, and return on equity, are often ignored by small enterprises due to a lack of managerial expertise (Dirman, 2020). These ratios provide insights into the value of a company and help determine its financial performance. Comparing their efficiency to that of other organizations and measuring their ability to compete is also challenging for small businesses (Deyganto & Alemu, 2019). It is difficult to accurately assess a small business's success by comparing its performance in the first year of operation to its progress in the fourth or fifth year, especially without the use of computerized systems (Beg, 2018). The study's findings indicate that small-sized enterprises struggle to raise the necessary funds to register their organizations on the stock market. Profitability ratios provide an accurate representation of a company's size and include details about share ratios published in the financial press (Gofwan, 2022). This information helps evaluate variations in profits per share and estimate potential dividends for investors (Ha, 2020). Furthermore, small businesses face challenges in determining product cost information for financial transactions and often fail to properly document business costs. It is essential for small firms to maintain accurate records of their goods and services in order to assess the success of their companies (Harjito et al., 2022).

CONCLUSIONS

Taking into consideration all the different components of an accounting information system, it can be determined that the system is highly important in business, particularly in administration. It facilitates decision-making by management, and in this context, the accounting system deserves recognition for the significant value it brings to organizations. The objective of this study is to examine the empirical literature on accounting information systems and companies. By utilizing all available measurement tools in company administration, the information provided will be optimal and beneficial for business activities. Accounting information systems (AIS) also play a crucial role in the social and financial systems. This study can help current and future employees effectively utilize the system for proper business administration and execution. Based on the research findings, small enterprises were not using accounting information systems. Therefore, it is recommended that small enterprises implement these techniques in their company administration to foster business growth. Additionally, organizations that are already using these systems should educate their employees on the optimal use of computerized systems in particular. It is further recommended that governments provide regulations and guidelines to support the implementation of these technologies in the small business sector.

These regulations should include tax exemptions or discounts on hardware used for these systems. Policymakers should be provided with information to help them examine the relationship between accounting information systems and small business profitability, enabling them to make more informed decisions about information technology capabilities. It is also important for business organizations to employ other profitability indicators, such as cost-volume-profit analysis, because they are easier to use and quickly adaptable for small businesses. Additionally, most of the participants in the study evaluated the accounting information system using standards they and previous authors had developed. Furthermore, this systematic literature review contributes to the existing literature in three ways:

1) it demonstrates the usefulness of accounting information systems;

2) it presents suggestions for enhancing the accounting information system; and

3) it highlights research gaps that need to be addressed to promote the adoption of accounting information systems and improve company profitability.

While this study produced interesting findings, it could have been expanded in various ways. Lastly, instead of solely focusing on a company's profitability, many research projects examine the impact of accounting information systems on profitability. Therefore, a systematic literature review method was employed, which involved a thorough examination of related literature. The results indicate that the goal of this article has been achieved.

AUTHOR CONTRIBUTIONS

Conceptualization: Kansilembo Freddy Aliamutu.
Data curation: Kansilembo Freddy Aliamutu.
Formal analysis: Kansilembo Freddy Aliamutu.
Funding acquisition: Kansilembo Freddy Aliamutu, Msizi Vitalis Mkhize.
Investigation: Kansilembo Freddy Aliamutu.
Methodology: Kansilembo Freddy Aliamutu, Msizi Vitalis Mkhize.
Project administration: Kansilembo Freddy Aliamutu.
Resources: Kansilembo Freddy Aliamutu, Msizi Vitalis Mkhize.
Software: Kansilembo Freddy Aliamutu, Msizi Vitalis Mkhize.
Supervision: Msizi Vitalis Mkhize.
Validation: Kansilembo Freddy Aliamutu, Msizi Vitalis Mkhize.
Visualization: Kansilembo Freddy Aliamutu, Msizi Vitalis Mkhize.
Writing – original draft: Kansilembo Freddy Aliamutu, Msizi Vitalis Mkhize.
Writing – reviewing & editing: Kansilembo Freddy Aliamutu, Msizi Vitalis Mkhize.

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