



INNOVATIONS IN SMART ACCOUNTING SYSTEMS TO ACHIEVE EFFICIENCY AND ACCURACY IN FINANCIAL MANAGEMENT

Sifaul Anwar¹, Retno Paryati², Luis Santos³

¹ Politeknik TEDC Bandung, Indonesia

² Politeknik TEDC Bandung, Indonesia

³ University of the Philippines Diliman, Philippines

Corresponding Author:

Sifaul Anwar,
Politeknik TEDC Bandung, Indonesia
Jl. Politeknik Jl. Pesantren, Cibabat, Kec. Cimahi Utara, Kota Cimahi, Jawa Barat 40513
Email: sifaulanwar@poltektedc.ac.id

Article Info

Received: December 02, 2025

Revised: March 10, 2026

Accepted: May 05, 2026

Online Version: June 30, 2026

Abstract

The massive growth of digital technology has had a significant impact on financial management systems and accounting practices across various types of organizations. Conventional accounting models that still rely on manual processes often face various challenges, including a high potential for errors in transaction recording, slow preparation of financial statements, low operational effectiveness, and limitations in generating timely and relevant information to support decision-making. This study aims to evaluate the role of intelligent accounting systems in improving the quality of financial management, particularly regarding the efficiency of work processes and the accuracy of the financial information generated. The approach used in this study is a literature review employing qualitative methods, drawing from various academic sources such as scientific articles, reference books, research reports, and other relevant documents discussing the development of contemporary accounting technology. The results of the study indicate that the implementation of such systems is capable of optimizing financial administration processes through the automation of various accounting activities, accelerating data processing and presentation, reducing the risk of errors caused by human factors, and enhancing transparency and accountability in financial management. Thus, the implementation of a smart accounting system can serve as an innovative solution that plays a crucial role in achieving financial management that is more efficient, reliable, and responsive.

Keywords: Accounting Accuracy, Digital Innovation, Financial Efficiency



© 2026 by the author(s)

This article is an open-access article distributed under the terms and conditions of the Creative Commons Attribution-ShareAlike 4.0 International (CC BY SA) license (<https://creativecommons.org/licenses/by-sa/4.0/>).

Journal Homepage

<https://research.adra.ac.id/index.php/jmf>

How to cite:

Anwar, S., Paryati, R & Santos, L. (2026). Innovations In Smart Accounting Systems to Achieve Efficiency And Accuracy in Financial Management. *Journal Markcount Finance*, 4(3), 267–280. <https://doi.org/10.70177/jmf.v4i3.4025>

Published by:

Yayasan Adra Karima Hubbi

INTRODUCTION

The rapid advancement of information and communication technology has brought about significant changes across various sectors of life, including the economy, the business world, and organizational management systems. The advent of the digital age requires every organization to adapt to technological advancements in order to enhance productivity, effectiveness, and efficiency in carrying out operational activities. In the current climate, technology is no longer viewed merely as a supporting tool but has evolved into a strategic element that plays a crucial role in ensuring organizational sustainability and enhancing competitiveness. A wide range of digital innovations continues to be developed to optimize work processes, improve service quality, and provide information that is more relevant, accurate, and tailored to user needs. From a management perspective, digital transformation makes a significant contribution to creating decision-making systems based on valid and accountable data (Zhang, 2024). Therefore, the application and integration of technology into various organizational activities have become an indispensable necessity for addressing the challenges of an increasingly dynamic and complex environment. Furthermore, advances in digital technology have created opportunities for the development of systems that are more flexible, interconnected, and capable of responding quickly to change. Consequently, technological innovation has become one of the main pillars supporting the realization of effective, modern, and sustainable organizational governance.

The development of digital technology has driven fundamental changes in various organizational fields, including accounting and financial management systems. As a vital tool in organizational management, accounting serves to provide financial information that forms the foundation for planning, monitoring, evaluation, and the formulation of strategic policies (Kuaiber, 2024). The increasing pace of business activities and the growing number of transactions that must be processed require an accounting system capable of generating information quickly, accurately, and efficiently. The quality of financial management depends not only on an organization's ability to prepare financial statements but is also determined by its ability to provide relevant, reliable data and information that is accessible exactly when needed. In the context of digital transformation, the utilization of technology is a critical factor in optimizing accounting processes and enhancing the quality of the information produced. Integrating technology into accounting systems enables organizations to manage their finances in a more transparent, accountable, and effective manner. Therefore, modernizing accounting systems is an indispensable requirement in efforts to improve organizational performance and strengthen competitiveness amid an increasingly complex business environment (Ahmad, 2024).

Amid increasingly rapid technological advancements, a number of organizations still rely on traditional accounting systems that depend on manual recording and processing of financial data. This approach often creates various obstacles in the performance of accounting functions, ranging from a high likelihood of data entry errors and the repetitive recording of the same information to delays in the preparation and presentation of financial reports. Furthermore, limited integration between system modules prevents financial information from being accessed quickly and accurately when needed by management. This situation risks compromising the quality of information used as the basis for organizational planning, control, and decision-making processes (Artikis, 2024). In an ever-changing business environment characterized by increasingly fierce competition, delays in obtaining accurate information can

increase operational risks and hinder the achievement of organizational goals. Therefore, the development of a more modern and adaptive accounting system is necessary to address the various limitations inherent in conventional approaches. The presence of an innovative system is expected to accelerate financial data management processes, improve work productivity, and generate information with a higher level of accuracy and reliability as a basis for effective decision-making (Afzal, 2026).

The rapid advancement of digital technology has driven fundamental changes in various organizational activities, particularly in the fields of accounting and financial management. These advancements require organizations to adapt their financial management systems to keep pace with an increasingly complex and technology-driven environment. On the other hand, the use of traditional accounting systems that still rely on manual processes often leads to various problems, such as a high likelihood of errors in transaction recording, slow financial report preparation and presentation, suboptimal work productivity, and limitations in providing accurate and timely information to management (Mishra, 2025). This situation highlights the need to transform accounting systems toward a more modern, technology-driven approach. Various digital innovations—including artificial intelligence, cloud computing services, data analytics, and business process automation—have opened up new opportunities to build accounting systems that are more adaptive, integrated, and efficient. Through the use of these technologies, financial data management can be conducted sustainably and in real-time, thereby improving the quality of the information produced. The availability of fast, accurate, and integrated information ultimately supports organizational performance improvement by enhancing operational efficiency, resource management effectiveness, and the accuracy of financial decision-making processes (Dashkevich, 2024).

Intelligent accounting systems represent a technological innovation designed to address the various challenges of financial management in the era of digital transformation. These systems combine modern information technology with automation features and data analysis capabilities, enabling accounting processes to be carried out more efficiently, quickly, and accurately. Various accounting activities, ranging from transaction recording, financial data processing, report reconciliation, to the preparation of financial information, can be performed in an integrated manner with minimal human intervention, thereby reducing the risk of errors (Fahdil, 2024). In addition to improving the speed and accuracy of work processes, this system is also capable of providing real-time financial information, which makes it easier for management to monitor financial conditions and conduct ongoing evaluations. The availability of accurate and up-to-date data provides stronger support for policy formulation and strategic decision-making within the organization. Furthermore, the implementation of an intelligent accounting system not only focuses on improving productivity but also plays a role in strengthening transparency, accountability, and the effectiveness of internal controls. With these various advantages, an intelligent accounting system can be viewed as a suitable alternative solution to support modern, adaptive financial management that is oriented toward improving the quality of organizational governance (Dong, 2026).

The implementation of an intelligent accounting system not only contributes to improved operational efficiency but also holds significant strategic value in supporting the organization's long-term sustainability and competitiveness. The availability of accurate, integrated, and timely financial information enables management to identify various development opportunities, minimize potential risks, and formulate more effective, data-driven policies.

Furthermore, a fully integrated system strengthens synergy and coordination among departments, allowing financial management processes to proceed in a more systematic and efficient manner (Mittal, 2025). Smart technology's ability to identify data discrepancies, recording errors, and unusual transactions helps strengthen internal control systems and support efforts to prevent fraud and the misuse of organizational assets. As the demands of various stakeholders for transparency, accountability, and the quality of financial reporting increase, the existence of a system capable of producing reliable and trustworthy information has become an increasingly urgent need. Therefore, research on the development and implementation of smart accounting systems is important to understand their role in improving the effectiveness, efficiency, and accuracy of financial management in modern organizational environments (Almubaydeen, 2026).

This study is motivated by the various challenges still faced in organizational financial management; therefore, the research focuses on the development and implementation of intelligent accounting systems as a solution to improve the efficiency and accuracy of financial information management. The research discussion aims to explore the role of smart technology in optimizing accounting activities, ranging from transaction recording and data processing to the presentation of financial reports that are faster, more accurate, and more reliable. Additionally, this study seeks to examine the various benefits organizations can gain through the implementation of accounting systems supported by modern digital technology (Demchuk, 2025). The urgency of this research is increasing in line with the paradigm shift in financial management, which is moving from a manual approach toward integrated, automated, and data-driven systems. Advances in information technology have created opportunities for organizations to improve the quality of financial management by utilizing systems capable of generating real-time information and supporting more effective decision-making. Therefore, the results of this study are expected not only to enrich the body of knowledge in the field of digital accounting but also to provide practical contributions as a reference for organizations seeking to improve financial management performance through the implementation of innovative and sustainable smart accounting technologies (Seitshiro, 2024).

This study is based on a number of previous studies related to the topic under discussion. A study conducted by Serbanescu (2025) suggests that the implementation of digitalization in accounting systems contributes to increased efficiency in the process of preparing and reporting corporate financial statements. In addition, research conducted by Zheng, (2024) shows that the use of accounting automation technology can improve the quality of financial information through faster and more systematic data processing. Similar findings were also reported by Hou, (2026), which explains that the implementation of artificial intelligence in financial management can improve the accuracy of data analysis while enhancing the quality of management decision-making. However, these studies still focus their discussion on digitization, automation, and artificial intelligence as components examined separately. Meanwhile, this study adopts a more comprehensive perspective by examining intelligent accounting systems as an integrated whole that combines automation technology, artificial intelligence, and interconnected data management. Therefore, this study is expected to provide a more comprehensive contribution in explaining how innovations in intelligent accounting systems play a role in improving operational efficiency and the accuracy of financial management in a sustainable manner in the era of digital transformation.

RESEARCH METHOD

This study was conducted to comprehensively analyze the role of intelligent accounting system innovations in improving the efficiency and accuracy of financial management in the ever-evolving digital era. Advances in information technology have brought about various changes in modern accounting practices through the application of technologies such as artificial intelligence, workflow automation, and integrated information systems. These developments have driven the need for a more in-depth study of how intelligent accounting systems can contribute to improving the quality of an organization's financial management (Valaiyapathy, 2026). Therefore, this study aims to gain a comprehensive understanding of the concepts, implementation, and benefits of intelligent accounting systems in supporting more effective and accurate financial management. To achieve this objective, the study employs a qualitative approach that allows the researcher to conduct an in-depth review of various relevant scientific literature sources, thereby providing a broader and more in-depth understanding of the phenomenon under study (Ling, 2024).

Research Design

This study employs a qualitative approach using library research as the primary framework for conducting the research. This design was chosen because of its suitability for the research objectives, which focus on the exploration and analysis of various theories, concepts, and findings from previous research related to intelligent accounting systems and financial management. This approach provides a strong foundation for comprehensively understanding the development of contemporary accounting technology, particularly regarding the utilization of artificial intelligence, process automation, and integrated financial information systems. Thus, this research is capable of yielding a deeper understanding of the contribution of accounting technology innovations in enhancing operational effectiveness and the accuracy of financial information required by organizations (Yu, 2026).



Figure 1. Research Procedure of Intelligent Accounting System Innovation in Financial Management

The diagram in Figure 1 illustrates the research stages applied in a study on smart accounting system innovations as an effort to improve the efficiency and accuracy of financial management. The research process begins with the identification of issues and problems related to the development of accounting technology and the dynamics of financial management in the digital age. Once the problems were identified, the researchers determined the focus of the study to clarify the scope and direction of the research to be conducted. The next stage involved searching for and collecting various relevant scientific references, which were then screened and evaluated based on their validity, academic quality, and relevance to the research objectives. Sources that met the criteria were then grouped into several thematic categories to facilitate the review process (Tumorang, 2025). In the next stage, a literature synthesis was conducted by combining various theories, concepts, and previous research findings to establish a strong analytical foundation. The collected data was then analyzed using a descriptive-interpretive approach to identify patterns, interrelationships, and the role of intelligent accounting systems in supporting more effective financial management. The findings were then interpreted and critically discussed to generate a deep understanding of how accounting technology innovations contribute to improved operational performance and the quality of financial information.

Research Target/Subject

The focus of this study is not on individual respondents or groups of respondents, but rather on various sources of scientific literature related to the research topic. Research data was obtained from various academic references, such as articles published in scientific journals, academic books, seminar or conference proceedings, research reports, and other scientific documents discussing the development of intelligent accounting systems, digital transformation in accounting, the application of artificial intelligence in the financial sector, and the management of accounting information systems. Data sources were selected using a purposive technique, taking into account their relevance to the research topic, the credibility of the sources, the timeliness of the information, and their alignment with the study's objectives and focus. Through this selection process, the literature used is expected to provide a sufficient theoretical foundation and empirical evidence to support the analysis and offer a comprehensive understanding of the phenomena under investigation (Wudianto, 2025).

Research Procedure

This research was conducted through a series of steps designed in a structured and systematic manner to ensure the research objectives were optimally achieved. The research process began with the identification of issues and the formulation of a research focus related to the development of an intelligent accounting system to improve the quality of financial management. After the research focus was established, the researcher conducted a literature review of relevant materials from reliable academic sources to obtain data appropriate to the research topic. The collected literature was then screened based on scientific quality, the credibility of the sources, and their relevance to the research objectives and scope. Data meeting these criteria were subsequently grouped according to key themes, such as digital transformation in accounting, the application of artificial intelligence, financial process automation, operational efficiency improvements, and the accuracy of financial information. In the next stage, all classified data was analyzed and synthesized comprehensively to gain a deep and thorough understanding of the contribution of intelligent accounting systems in supporting more effective and high-quality financial management (Wei, 2024).

Instruments, and Data Collection Techniques

In this study, the researcher serves as the primary instrument (human instrument) responsible for the entire research process, from determining data sources and selecting and evaluating the literature to interpreting information and compiling the results of the analysis. Data collection was conducted using documentation techniques by reviewing and analyzing various academic sources relevant to the focus of the study. This process included searching for, identifying, recording, categorizing, and managing information obtained from various credible scientific references (Hnatyshyn, 2025). To ensure the quality and reliability of the data, this study prioritizes the use of sources from reputable scientific journals, academic reference books, research reports, and various other scientific publications directly related to the development and implementation of intelligent accounting systems. Through this procedure, the data obtained is expected to have a high level of validity, objectivity, and relevance, thereby optimally supporting the achievement of the research objectives.

Data Analysis Technique

Data analysis in this study employs a descriptive-interpretive approach aimed at gaining a deep understanding of the phenomenon under study. The analysis process begins with reading, reviewing, and thoroughly understanding all data collected from various sources of literature. The next stage involves simplifying the data through a process of reduction, grouping information based on specific themes, interpreting the meaning of the data, and integrating various findings into a cohesive analytical whole. In this process, the researcher conducts a comparative review of various theories, concepts, and previous research findings to identify patterns, relationships, and trends that illustrate the implementation of smart accounting systems in financial management. Subsequently, the findings are critically analyzed to reveal the role of smart technology in enhancing operational effectiveness and the accuracy of the financial information produced (N, 2024).

RESULTS AND DISCUSSION

Based on a review of various scientific sources discussing the development of digital technology in the field of accounting, it is evident that the implementation of intelligent accounting systems plays a significant role in improving the quality of an organization's financial management. The utilization of various modern technologies, such as artificial intelligence, workflow automation, data analytics, and integrated information systems, has driven fundamental changes in transaction recording processes, financial reporting, and the oversight of an organization's financial activities. Various research findings indicate that the use of intelligent accounting systems can produce work mechanisms that are more structured, efficient, faster, and have a higher level of accuracy compared to traditional systems that still rely on manual processes. This situation indicates that technology no longer serves merely as an administrative support tool but has evolved into a strategic instrument that helps organizations make decisions based on accurate information and data. Therefore, intelligent accounting systems can be viewed as a significant innovation that contributes to creating financial management that is more effective, efficient, and responsive to the demands of the digital age.

Research findings show that the implementation of intelligent accounting systems can improve financial administration performance through the use of integrated automation technology. Various activities that were previously performed manually and required a

significant allocation of time and effort, such as recording financial transactions, can be processed automatically with a higher level of accuracy. Additionally, this system has the capability to manage data categorization, perform transaction reconciliation, and generate financial reports more quickly and systematically compared to conventional procedures. This increase in efficiency provides significant benefits to organizations by allowing human resources to focus more on analytical and strategic tasks rather than routine and repetitive administrative work. Thus, the implementation of an intelligent accounting system not only speeds up work processes but also plays a crucial role in improving the overall quality and effectiveness of an organization’s financial management.

Further findings indicate that intelligent accounting systems play a vital role in accelerating the processing and presentation of financial information. System integration supported by digital technology enables real-time and continuous data updates, ensuring that available information always reflects the organization’s current financial status. The speed and accuracy of this information provision are critical elements in supporting the effectiveness of management’s decision-making processes. In an increasingly dynamic and competitive organizational environment, the ability to access data quickly provides strategic value by enabling the organization to respond more swiftly to changes, opportunities, and risks. Therefore, the implementation of an intelligent accounting system not only improves the efficiency of operational processes but also strengthens the organization’s capacity to perform financial planning, monitoring, and control functions more effectively.

One of the key findings of this study indicates that the implementation of an intelligent accounting system can reduce the potential for recording errors, which are typically caused by human error. In conventional accounting practices, various errors—such as data entry mistakes, inaccurate transaction calculations, or irregularities in document filing—often lead to a decline in the quality of financial information. However, the use of automation technology supported by artificial intelligence enables most accounting processes to be carried out in a structured, consistent manner and in accordance with established standards. The implementation of such systems has a positive impact on improving the reliability and quality of the financial data produced by organizations. Financial information with a high degree of accuracy will serve as a stronger foundation for supporting objective, evidence-based decision-making. Thus, intelligent accounting systems can be viewed as an effective, innovative solution for reducing various risks of errors arising from human limitations in managing and processing financial data.

Table 1. Key Findings on the Implementation of Intelligent Accounting Systems

Areas Analyzed	Pre-Implementation Conditions	Post-Implementation Status
Transaction Recording	Manual and time-consuming	Automated and faster
Data Processing	Disjointed and poorly integrated	Integrated in real time
Risk of Error	Relatively high due to human error	Lower and more controlled
Report Presentation	Requires a lengthy process	Faster and more accurate
Financial Transparency	Limited	Significantly improved
Accountability	Difficult to monitor comprehensively	Easier to monitor and evaluate

Based on the data presented in Table 1, the implementation of an intelligent accounting system has a positive impact on various aspects of financial management within the organization. The most significant improvements are seen in the acceleration of administrative processes, the optimization of data integration, and a reduction in the error rate in the processing and presentation of financial information. These findings indicate that the use of smart technology can strengthen the effectiveness of financial control systems while fostering the creation of more productive and efficient work mechanisms. Furthermore, the system's ability to integrate data in real-time enables financial information to be made available more quickly, accurately, and easily accessible to stakeholders. This advantage is a critical element in supporting the implementation of modern, adaptive organizational governance that is oriented toward the utilization of digital technology.

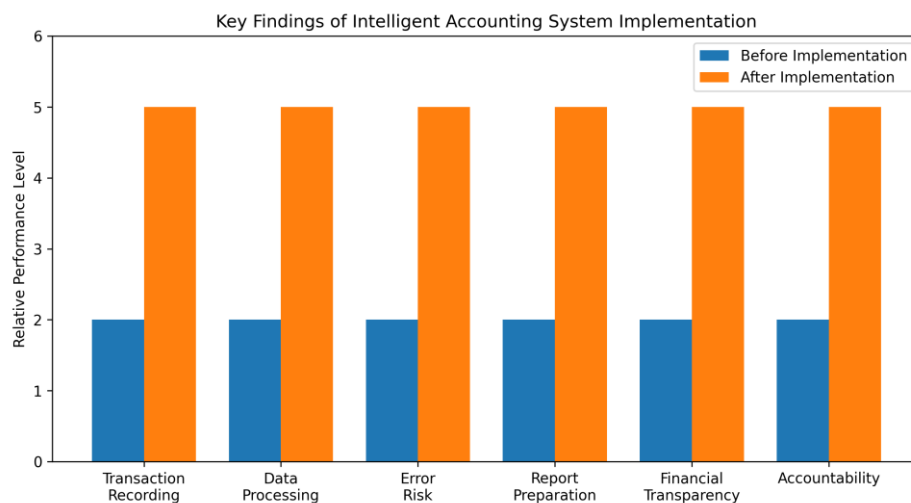


Figure 2. Effects of Intelligent Accounting Systems on Financial Administration and Reporting

The graph illustrates the differences in the organization's financial management conditions before and after the implementation of the smart accounting system across six key indicators: transaction recording, data processing, error risk levels, financial reporting, transparency, and accountability. Overall, there was a significant improvement in performance across all indicators following the system's implementation. Initially, transaction recording and report preparation were still dominated by manual procedures that tended to be time-consuming, while data processing was not fully integrated and remained prone to human error. However, following the implementation of the smart accounting system, various financial activities can now be executed more efficiently through real-time automation and data integration. These changes enable financial information to be generated with greater speed, accuracy, and efficiency. In addition, improvements in transparency and accountability mean that financial data is now easier for stakeholders to track, monitor, and evaluate. These results indicate that innovations in smart accounting systems play a crucial role in strengthening the quality of financial governance by improving operational efficiency, reducing the potential for errors, and providing more accurate and reliable information to inform managerial decision-making (Saleh, 2024).

Further research findings reveal that the implementation of an intelligent accounting system plays a crucial role in enhancing the transparency and accountability of an

organization's financial management. Through automated recording mechanisms, every financial transaction can be systematically recorded and properly documented, thereby enabling data tracing, oversight, and financial audits to be conducted more easily and accurately. The availability of information that is comprehensive, integrated, and organized provides strong support for organizations in implementing the principles of financial transparency and accountability (Bin-Nashwan, 2025). In addition, system integration enables management to gain broader access to the various financial information needed to conduct ongoing monitoring, evaluation, and control. These conditions help organizations improve the quality of financial governance while strengthening internal control mechanisms. Therefore, the existence of an intelligent accounting system not only provides benefits in the form of improved operational efficiency but also contributes significantly to the realization of more transparent, accountable, and professional organizational governance (Murugan, 2025).

Further research findings indicate that the implementation of an intelligent accounting system significantly contributes to improving the quality of an organization's decision-making processes. The availability of financial data updated in real time enables management to obtain more accurate, relevant, and up-to-date information in a shorter timeframe. Additionally, the system's integrated analytical capabilities help organizations identify financial patterns and trends, anticipate potential risks, and develop more targeted policies and strategies (Potryvaieva, 2024). In an ever-evolving and uncertain business environment, the speed and accuracy of data-driven decision-making are critical to an organization's sustainability and competitiveness. As such, intelligent accounting systems serve not only as tools for financial administration but also as strategic instruments that support more effective decision-making based on high-quality information (Hao, 2024).

In general, the research findings indicate that the implementation of intelligent accounting system innovations plays a crucial role in enhancing the effectiveness and accuracy of an organization's financial management. The various benefits resulting from the implementation of this system include the automation of accounting activities, real-time integration of financial information, minimization of human-error-related mistakes, increased transparency in data management, and the provision of information that supports more accurate decision-making processes (Stender, 2025). The findings indicate that intelligent accounting systems are technological innovations capable of addressing organizations' needs in managing the complexities of financial management in the digital age. Through the use of integrated and sustainable technology, organizations can not only improve the quality of their financial management but also strengthen their adaptability, competitiveness, and operational sustainability in the face of an increasingly dynamic environment (Fülöp, 2025).

CONCLUSION

This study concludes that innovations in intelligent accounting systems make a significant contribution to improving the quality of an organization's financial management in the face of the ever-evolving era of digitalization. The application of technology that combines automation, artificial intelligence, and information system integration is capable of overcoming various weaknesses that have long been inherent in traditional accounting systems. The implementation of such systems has proven to optimize transaction recording processes, financial information processing, and the preparation of reports more quickly and efficiently. In addition to improving operational effectiveness, integrated systems also enable real-time access

to financial data, thereby supporting management in carrying out planning, monitoring, and decision-making functions more effectively. Furthermore, the system's ability to reduce potential errors stemming from human factors helps enhance the accuracy and reliability of the financial information produced. Therefore, an intelligent accounting system not only serves as a tool for managing financial information but also acts as a strategic asset that can enhance organizational performance and support its sustainability and continuous development.

This study also demonstrates that the implementation of an intelligent accounting system makes a significant contribution to enhancing the transparency and accountability of an organization's financial management. The automated recording process, supported by systematically organized data documentation, enables every transaction and financial activity to be monitored, traced, and reviewed more effectively. These conditions play a role in fostering more transparent, credible financial management aligned with the principles of good governance. Additionally, the integration of various financial data into a single interconnected platform enables the availability of more comprehensive, accurate, and relevant information to support data-driven decision-making processes. The increased efficiency resulting from the use of this technology also provides organizations with the opportunity to allocate resources more optimally to activities of strategic value. Therefore, intelligent accounting systems can be viewed as a key solution to addressing the increasingly complex and dynamic challenges of financial management in the digital age.

DECLARATION OF AI AND AI ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

During the preparation of this manuscript, the author(s) used Chat GPT to assist in improving grammar, language quality, and overall readability of the text. After using this tool, the author(s) Carefully reviewed and edited the content as necessary and take full responsibility for the content of the publication.

AUTHOR CONTRIBUTIONS

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.

Author 2: Conceptualization; Data curation; In-vestigation.

Author 3: Data curation; Investigation.

DECLARATION OF COMPETING INTEREST

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

REFERENCES

- Afzal, M. T. (2026). Beyond the bottom line: Using generative AI to extract narrative financial disclosures. *International Journal of Accounting Information Systems*, 57(Query date: 2026-06-12 14:20:16). <https://doi.org/10.1016/j.accinf.2026.100777>
- Ahmad, A. Y. A. B. (2024). BC Technology AAA System Implementation. *2024 4th International Conference on Advance Computing and Innovative Technologies in Engineering Icacite 2024*, (Query date: 2026-06-12 14:20:16), 1545–1550. <https://doi.org/10.1109/ICACITE60783.2024.10616920>

- Almubaydeen, T. H. (2026). Continuous Improvement of Accounting Systems: A Study on the Impact of Information Technology and Electronic Auditing on the Accuracy of Accounting Information. *Studies in Systems Decision and Control*, 658(Query date: 2026-06-12 14:20:16), 1077–1090. https://doi.org/10.1007/978-3-032-15739-3_79
- Artikis, P. G. (2024). Benchmarking Machine Learning Algorithms to Predict Profitability Directional Changes. *Lecture Notes in Operations Research*, (Query date: 2026-06-12 14:20:16), 85–96. https://doi.org/10.1007/978-3-031-61589-4_8
- Bin-Nashwan, S. A. (2025). Does AI adoption redefine financial reporting accuracy, auditing efficiency, and information asymmetry? An integrated model of TOE-TAM-RDT and big data governance. *Computers in Human Behavior Reports*, 17(Query date: 2026-06-12 14:20:16). <https://doi.org/10.1016/j.chbr.2024.100572>
- Dashkevich, N. (2024). Blockchain Financial Statements: Innovating Financial Reporting, Accounting, and Liquidity Management. *Future Internet*, 16(7). <https://doi.org/10.3390/fi16070244>
- Demchuk, O. (2025). Cost accounting and costing of crop production in agribusinesses of various forms of ownership. *Ekonomika Apk*, 32(2), 100–112. <https://doi.org/10.32317/ekon.apk/2.2025.100>
- Dong, Y. (2026). Can Corporate Governance Information Facilitate Accounting Fraud Detection? Machine Learning Evidence for Chinese Listed Firms. *International Journal of Accounting*, 61(2). <https://doi.org/10.1142/S109440602550009X>
- Fahdil, H. N. (2024). Blockchain Technology in Accounting Transforming Financial Reporting and Auditing. *Journal of Ecohumanism*, 3(5), 216–233. <https://doi.org/10.62754/joe.v3i5.3903>
- Fülöp, M. T. (2025). Digital Transformation of the Accounting Profession at the Intersection of Artificial Intelligence and Ethics. *Economics*, 19(1). <https://doi.org/10.1515/econ-2025-0155>
- Hao, E. (2024). Enhanced Managerial Decision Optimization in Financial Accounting Using the Picture Fuzzy MARCOS-Based MCGDM Approach. *IEEE Access*, 12(Query date: 2026-06-12 14:20:16), 178171–178190. <https://doi.org/10.1109/ACCESS.2024.3507947>
- Hnatyshyn, L. (2025). Digital innovations in accounting as economic growth factors of an enterprise. *Scientific Bulletin of Mukachevo State University Series Economics*, 12(1), 75–89. <https://doi.org/10.52566/msu-econ1.2025.75>
- Hou, Y. (2026). Deep reinforcement learning-based cloud data integrity verification algorithm for accounting informatization. *Discover Artificial Intelligence*, 6(1). <https://doi.org/10.1007/s44163-026-00950-9>
- Kuaiber, M. Q. (2024). Automation and the Future of Accounting: A Study of AI Integration in Financial Reporting. *2024 International Conference on Knowledge Engineering and Communication Systems Ickecs 2024*, (Query date: 2026-06-12 14:20:16). <https://doi.org/10.1109/ICKECS61492.2024.10616967>
- Ling, X. (2024). Design of an enterprise accounting system based on decision tree model. *Applied Mathematics and Nonlinear Sciences*, 9(1). <https://doi.org/10.2478/amns.2023.2.00051>
- Mishra, A. (2025). Blockchain adoption in cross-border cold supply chains: Cost, Efficiency and Trust. *Transportation Research Part E Logistics and Transportation Review*, 201(Query date: 2026-06-12 14:20:16). <https://doi.org/10.1016/j.tre.2025.104236>
- Mittal, V. (2025). Classification of Bank Statement using CNN Algorithm for Accounting Support. *2025 5th International Conference on Advancement in Electronics and Communication Engineering Aece 2025*, (Query date: 2026-06-12 14:20:16), 734–737. <https://doi.org/10.1109/AECE67531.2025.11386745>

- Murugan, M. (2025). Emotional Contagion and Organizational Performance in MSMEs: A Structural Equation Modelling Approach. *International Journal of Accounting and Economics Studies*, 12(Query date: 2026-06-12 14:20:16), 377–384. <https://doi.org/10.14419/2pmysr323>
- N, A. (2024). Digital transformation in accounting: Elevating effectiveness across accounting, auditing, reporting and regulatory compliance. *Journal of Accounting and Organizational Change*, (Query date: 2026-06-12 14:20:16). <https://doi.org/10.1108/JAOC-01-2024-0039>
- Potryvaieva, N. (2024). Digitalization of control and accounting processes of agricultural enterprises: Risk assessment and management. *Ekonomika Apk*, 31(5), 45–58. <https://doi.org/10.32317/ekon.apk/5.2024.45>
- Saleh, I. (2024). Electronic payment systems' characteristics and accounting information systems effectiveness: The moderating impact of perceived customers' uncertainty. *Cogent Business and Management*, 11(1). <https://doi.org/10.1080/23311975.2024.2396050>
- Seitshiro, M. B. (2024). Credit risk prediction with and without weights of evidence using quantitative learning models. *Cogent Economics and Finance*, 12(1). <https://doi.org/10.1080/23322039.2024.2338971>
- Serbanescu, V. A. (2025). Deep Learning for Effective Classification and Information Extraction of Financial Documents. *International Conference on Pattern Recognition Applications and Methods*, 1(Query date: 2026-06-12 14:20:16), 749–756. <https://doi.org/10.5220/0013261000003905>
- Stender, S. (2025). Enhancing Business Competitiveness through Accounting Digitalization. *Salud Ciencia Y Tecnologia Serie De Conferencias*, 4(Query date: 2026-06-12 14:20:16). <https://doi.org/10.56294/sctconf2025693>
- Tumorang, A. L. (2025). Determinan of Digital Accounting Implementation in SMEs in Kaldera Danau Toba Region Indonesia. *Studies in Systems Decision and Control*, 291(Query date: 2026-06-12 14:20:16), 781–793. https://doi.org/10.1007/978-3-031-87372-0_67
- Valaiyapathy, N. (2026). Demand Forecasting in Retail Using Prophet and Deep Learning. *Proceedings of 2nd International Conference on Visual Analytics and Data Visualization Icvadv 2026*, (Query date: 2026-06-12 14:20:16), 824–830. <https://doi.org/10.1109/ICVADV67766.2026.11469904>
- Wei, C. (2024). Determination method for horizontal load-bearing capacity of pile group for large LNG tank. *You Qi Chu Yun Oil and Gas Storage and Transportation*, 43(9), 1056–1063. <https://doi.org/10.6047/j.issn.1000-8241.2024.09.011>
- Wudianto, J. A. (2025). Determinants Influencing Cloud Accounting Adoption Among Micro and Small Enterprises. *Proceeding 2025 4th International Conference on Creative Communication and Innovative Technology Empowering Transformative Mature Leadership Harnessing Technological Advancement for Global Sustainability Iccit 2025*, (Query date: 2026-06-12 14:20:16). <https://doi.org/10.1109/ICCIT65724.2025.11167874>
- Yu, Y. (2026). Design of Automatic Generation System of Financial Statements Integrating Natural Language Processing and Agent Modeling. *Iet Conference Proceedings*, 2025(47), 562–566. <https://doi.org/10.1049/icp.2026.0264>
- Zhang, X. (2024). Automatic Generation Algorithm and System of Accounting Entries Based on Unit Budget System. *3rd IEEE International Conference on Distributed Computing and Electrical Circuits and Electronics Icdcece 2024*, (Query date: 2026-06-12 14:20:16). <https://doi.org/10.1109/ICDCECE60827.2024.10548287>
- Zheng, X. (2024). Data mining algorithm in the identification of accounting fraud by smart city information technology. *Heliyon*, 10(9). <https://doi.org/10.1016/j.heliyon.2024.e30048>

Copyright Holder :

© Sifaul Anwar et al. (2026).

First Publication Right :

© Journal Markcount Finance

This article is under:

