

PUBLIC SECTOR ACCOUNTING INFORMATION SYSTEMS AND THEIR IMPACT ON ORGANIZATIONAL PERFORMANCE

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Abstract

This study aims to analyze the role of public sector accounting information systems and their impact on organizational performance through a literature review approach. Accounting information systems in the public sector are a crucial instrument for increasing transparency, accountability, and efficiency in state financial management. In this study, various scientific literature sources, such as international journals, academic books, and research reports, were systematically analyzed to identify the relationship between the implementation of accounting information systems and improved organizational performance. The study results indicate that the effective implementation of accounting information systems can accelerate the decision-making process, improve the quality of financial reports, and support better internal control. Furthermore, factors such as human resource competence, technological support, and management commitment also influence the system's success in driving organizational performance. However, challenges such as limited infrastructure, resistance to change, and lack of training remain obstacles to optimizing accounting information systems in the public sector. Therefore, an integrative strategy is needed that includes strengthening human resource capacity, improving technology quality, and policies that support sustainable system implementation to achieve optimal organizational performance.

Keywords: Accounting Information Systems, Public Sector, Organizational Performance, Transparency, Accountability

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INTRODUCTION

The rapid development of information technology has brought significant changes to various sectors, including the public sector. Digital transformation not only impacts how organizations operate but also drives changes in financial management and accounting systems. In the public sector context, accounting information systems are a crucial instrument in supporting transparency, accountability, and the effectiveness of public resource management. Public sector accounting information systems are designed to collect, process, and present relevant financial information to support decision-making by stakeholders, both internal and external (Alsharari & Ikem, 2023a). Therefore, these systems are not merely administrative but also strategic in improving organizational performance.

The performance of public sector organizations is a growing concern, particularly in an era of heightened demands for public accountability. The public, as a primary stakeholder, expects efficient, transparent, and responsive services to meet public needs. In this regard, accounting information systems serve as a tool that can improve the quality of financial information, thereby supporting organizational planning, control, and performance evaluation. The information generated by these systems enables management to analyze budget utilization, operational efficiency, and the achievement of organizational goals in a more measurable and systematic manner (Sunarta & Astuti, 2023).

However, the implementation of accounting information systems in the public sector does not always run optimally. Various challenges often arise, ranging from limited technological infrastructure, lack of human resource competency, to resistance to organizational change. Furthermore, the complexity of regulations and bureaucracy in the public sector also pose obstacles to effective system implementation. This creates a gap between the potential benefits of accounting information systems and the reality of their implementation on the ground. Therefore, it is important to examine the extent to which public sector accounting information systems actually impact organizational performance.

From a theoretical perspective, accounting information systems can improve organizational performance by improving the quality of the information they produce. Accurate, timely, and relevant information will assist management in making better decisions (Sunarta & Astuti, 2023). Furthermore, integrated systems also enable more effective coordination between work units, thereby reducing duplication of work and increasing operational

efficiency. In the long term, this can contribute to improving overall organizational performance, both financially and non-financially.

Furthermore, accounting information systems also play a role in increasing transparency and public accountability. With a digitized system, financial recording and reporting processes become more transparent and accessible to stakeholders. This not only increases public trust in the government but also encourages good governance. In this context, organizational performance is measured not only by the efficiency of resource use but also by the extent to which the organization is able to meet the principles of transparency and accountability (Al-Okaily et al., 2022).

On the other hand, technological developments such as cloud computing, big data, and artificial intelligence also provide new opportunities for developing public sector accounting information systems (Tripathi & Kalia, 2024). These technologies enable the rapid and accurate processing of large amounts of data, thereby improving the quality of the resulting information. However, utilizing these technologies also requires organizational readiness, both in terms of infrastructure and human resources. Without adequate readiness, technology implementation can actually create new risks, such as system errors, data leaks, or excessive dependence on technology.

Research on public sector accounting information systems and their impact on organizational performance is crucial, given the strategic role these systems play in supporting good governance. This research is expected to provide an overview of the extent to which accounting information systems have been effectively implemented in the public sector and how they impact organizational performance. Furthermore, this research can identify factors influencing the successful implementation of these systems, thus providing a basis for formulating more effective policies and strategies in the future.

Therefore, the background of this research is based on the need to understand the relationship between public sector accounting information systems and organizational performance in greater depth. In the context of increasing demands for transparency and accountability, accounting information systems no longer function merely as a recording tool, but also as a strategic tool for improving organizational performance. Therefore, this research is expected to provide both theoretical and practical contributions to the development of more effective and sustainable public sector accounting information systems.

RESEARCH METHOD

The research method used in this study is a literature review, which aims to deeply examine concepts, theories, and empirical findings related to public sector accounting information systems and their impact on organizational performance. Research data was obtained through a search of various scientific sources, such as reputable international journals, academic books, research reports, and official documents relevant to the research topic. The data collection process was conducted systematically using appropriate keywords, then selected based on relevance, quality, and contribution to understanding the relationship between public sector accounting information systems and organizational performance. The literature used encompasses publications spanning a specific time period to reflect recent developments in the field.

Next, data analysis was conducted using a qualitative descriptive approach through a process of synthesis and interpretation of the various sources collected. The researcher identified patterns, similarities, and differences in previous research results to then formulate a comprehensive understanding of how public sector accounting information systems influence the efficiency, transparency, accountability, and effectiveness of organizational performance. This analysis also included an evaluation of factors that moderate this relationship, such as the quality of human resources, technological support, and organizational policies. With this approach, research is expected to be able to provide a complete and in-depth picture and produce relevant recommendations for the development of practices and policies in the public sector.

RESULT AND DISCUSSION

The Role of Accounting Information Systems in Public Financial Management

The role of accounting information systems in public financial management is becoming increasingly crucial with the increasing demands for transparency, accountability, and efficiency in government administration (Husam Mohammed & Ibrahim, 2025). In the public sector context, accounting information systems serve not only as a tool for recording financial transactions but also as a strategic instrument supporting the planning, implementation, control, and evaluation of fiscal policies. With an integrated, technology-based system, public financial management can be carried out more systematically, accurately, and timely, thereby improving the overall quality of governance.

One of the primary roles of accounting information systems in public financial management is to provide relevant and reliable financial information.

The information generated by these systems is used by various parties, from internal financial managers to external stakeholders such as the legislature and the public. The availability of accurate and real-time data enables more informed decision-making, particularly in terms of budget allocation, expenditure control, and program evaluation. Without an adequate information system, the decision-making process has the potential to be ineffective because it is based on incomplete or delayed information (Ingabire et al., 2023).

Furthermore, accounting information systems play a crucial role in increasing transparency in public financial management (Namazi & Rezaei, 2024). Transparency is a key principle of good governance, where the public has the right to know how public funds are managed and used. Through a structured accounting information system, financial reports can be prepared in a clear, standardized, and easily accessible manner. This not only increases public trust in the government but also encourages a culture of openness in the management of state and regional finances.

In terms of accountability, accounting information systems help ensure that every budget expenditure is properly accounted for. These systems record every transaction in detail and systematically, facilitating audit and oversight processes. A clear audit trail minimizes the potential for budget irregularities or misuse. Furthermore, these systems enable continuous monitoring of budget implementation, allowing any deviations to be promptly identified and acted upon.

The role of accounting information systems is also evident in improving operational efficiency in public financial management. Processes that were previously manual and time-consuming can be automated through technology-based systems. This not only reduces the possibility of human error but also speeds up financial administration processes. This efficiency ultimately results in operational cost savings and increased productivity for government officials. With an integrated system, various work units can connect and share data more effectively, thereby reducing duplication of work and improving coordination between agencies (Qatawneh, 2023).

Furthermore, accounting information systems contribute to supporting better planning and budgeting. Historical data stored in the system can be used as a basis for trend analysis and future financial projections. This allows the government to prepare a more realistic budget that aligns with public needs. Furthermore, this system also enables the implementation of performance-based budgeting, where fund allocation is based on the achievement of specific

outputs and outcomes. This encourages more effective and results-oriented budget use.

In the context of internal control, accounting information systems play a crucial role in creating stronger oversight mechanisms. These systems are equipped with various control features, such as transaction authorization, access restrictions, and data validation, aimed at preventing errors and fraud. Integrated controls within the system can better manage financial risks. Furthermore, these systems facilitate the implementation of internal and external audits, as the required data is available in a complete and structured manner (Waromi, 2024).

Developments in information technology have also driven the transformation of accounting information systems in the public sector. The implementation of technologies such as cloud computing, big data, and artificial intelligence offers opportunities to significantly improve the quality of financial management. Modern technology-based systems enable more in-depth and predictive data analysis, enabling the government to identify potential risks and opportunities more quickly. However, utilizing these technologies also requires adequate human resource readiness and infrastructure for optimal operation.

Despite its numerous benefits, implementing accounting information systems in public financial management also faces several challenges. One of the main challenges is the limited competence of human resources in operating complex systems. Furthermore, resistance to change and a lack of commitment from leaders can also hinder the success of system implementation. Therefore, ongoing efforts are needed to improve the capacity of civil servants, both through training and competency development. Strong policy support and commitment from all parties are also crucial factors in ensuring the successful implementation of this system.

Challenges and Obstacles in Implementing Public Sector Accounting Information Systems

Challenges and obstacles in implementing public sector accounting information systems are complex and multidimensional issues, involving technical, organizational, human resource, and regulatory aspects. In the context of public financial management, which increasingly demands transparency, accountability, and efficiency, the existence of accounting information systems is crucial. However, their implementation does not always

run optimally due to various interrelated obstacles often rooted in structural and cultural conditions within public sector organizations.

One of the main challenges lies in the limited human resources with adequate competencies in information technology and accounting (Alsharari & Ikem, 2023b). Many government agencies still face a gap between the need for professionals capable of operating and managing accounting information systems and the availability of available resources. This is exacerbated by low levels of training and ongoing capacity development, which tends to make it difficult for employees to adapt to new systems. As a result, information systems are not utilized optimally and are often used only for fulfilling administrative obligations, rather than as strategic tools for decision-making.

Furthermore, another significant obstacle is resistance to change arising from within the organization. Implementing accounting information systems often changes long-standing work procedures, creating discomfort for employees. A conventional work culture that is less adaptable to innovation is a hindering factor in the digital transformation process (Duan et al., 2023). In some cases, employees show reluctance to learn new systems due to feeling burdened or worried about losing their role in automated work processes. This situation indicates that psychological aspects and organizational culture significantly influence the success of information system implementation.

In terms of technological infrastructure, many public sector agencies still face limitations in terms of hardware, networks, and other supporting systems. Inequitable access to technology, especially in remote areas, is a serious obstacle to implementing integrated accounting information systems. These limitations not only slow down data processing but also increase the risk of errors and data loss. Furthermore, the lack of adequate technical support can lead to prolonged operational disruptions in the event of system damage or failure.

The next challenge relates to regulatory and policy aspects, which often do not fully support the effective implementation of accounting information systems (Mawarti & Yaya, 2025). Changing or unsynchronized regulations between agencies can create confusion in system implementation. Furthermore, the lack of established standards for the development and use of accounting information systems leads to variations in practices that can hinder national data integration. This demonstrates that regulatory harmonization is a crucial factor in creating a coordinated and efficient system.

Data security issues are also a significant challenge in the implementation of public sector accounting information systems. Government financial data is

highly sensitive and at high risk of misuse (Mawarti & Yaya, 2025). Therefore, the systems used must have a high level of security to protect data from external and internal threats. However, in practice, many agencies still lack adequate security systems, both technologically and policy-wise. This increases the potential for data leaks, information manipulation, and cyberattacks that can harm the state.

Furthermore, budget constraints also pose a significant obstacle to the development and maintenance of accounting information systems. Implementing a sophisticated system requires significant investment, both in hardware and software procurement, and human resource training. In times of fiscal constraints, many agencies have to postpone or even neglect information system development as it is not considered a top priority. However, investing in accounting information systems can actually improve the efficiency and effectiveness of financial management in the long term (Azizi, 2023).

System integration issues also frequently arise in the implementation of public sector accounting information systems. Many agencies use disparate, disconnected systems, complicating data exchange and inter-agency coordination. This system fragmentation leads to data duplication, information inconsistencies, and delays in the preparation of financial reports. Therefore, efforts are needed to develop a nationally integrated system so that financial information can be accessed in real time and support more accurate decision-making.

In addition to internal factors, external pressures such as public demands for transparency and accountability also pose challenges for the public sector. The public is now increasingly critical and demands that the government provide open and easily accessible financial information. This encourages government agencies to continuously improve the quality of their accounting information systems. However, without adequate support from various stakeholders, these efforts often fail to achieve the desired results.

Thus, it can be concluded that the implementation of public sector accounting information systems faces various interrelated challenges and obstacles. Efforts to address these issues require a comprehensive and sustainable approach, involving increased human resource capacity, strengthened technological infrastructure, regulatory harmonization, and a strong commitment from all stakeholders. Without integrated efforts, accounting information systems will not be able to optimally contribute to improving public sector performance and accountability.

The Impact of Digitalization on Public Administration Reform

Digitalization has become a major driving force behind transformation in various sectors, including public administration. Public administration reform, which previously operated conventionally, is now accelerating through the adoption of digital technology, enabling bureaucratic processes to become more efficient, transparent, and responsive to public needs. In this context, digitalization is not merely understood as the use of technology, but also as a paradigm shift in governance oriented towards quality public services.

One of the main impacts of digitalization on public administration reform is increased efficiency in bureaucratic work processes (Tkachenko et al., 2025). Through electronic-based systems, various administrative processes that previously required considerable time can be completed more quickly and accurately. For example, the use of management information systems allows for real-time data processing, thereby accelerating government decision-making. Furthermore, digitalization reduces reliance on physical documents, which have often been a source of delays and errors in administration. With digital data integration, coordination between agencies becomes easier and more structured, thereby minimizing the possibility of data duplication or inconsistency.

Beyond efficiency, digitalization also contributes to increased transparency and accountability in public administration. Through digital platforms, the public can access information related to government policies, budgets, and performance more openly. This encourages a more transparent and accountable government. With widespread access to information, the public has the opportunity to oversee government operations, thereby minimizing the potential for corruption, collusion, and nepotism. Digitalization also enables the implementation of more effective technology-based reporting and oversight systems, such as e-audit and e-procurement, which can improve integrity in state financial management (Ivanova et al., 2024).

Another significant impact is the improved quality of public services. Digitalization enables the government to provide faster, easier, and more affordable services to the public. Through online applications, the public can access various public services without having to visit government offices in person. This not only saves time and money but also increases public satisfaction with the services provided. Furthermore, digitalization also enables the government to understand community needs more deeply through data analysis, enabling more targeted policies.

However, the implementation of digitalization in public administration reform also faces various challenges. One major challenge is the digital divide that persists in various regions, particularly in remote areas. Limited technological infrastructure and internet access hinder the equitable implementation of digital systems. Furthermore, low levels of digital literacy among government officials and the public also hinder the optimal use of technology. Without increased human resource capacity, digitalization has the potential to be ineffective and even create new gaps in public services.

Another challenge relates to data security and privacy. In digital systems, data is a crucial asset, so data protection must be a top priority (Arifin, 2024). The risk of data leaks and cyberattacks can threaten public trust in the public administration system. Therefore, the government needs to develop a robust security system and clear regulations regarding personal data protection. Furthermore, awareness among all parties regarding the importance of maintaining information security in the digital age is also required.

Furthermore, digitalization also requires a change in organizational culture within the bureaucracy. Public administration reform is not only related to system changes, but also changes in the mindset and working methods of government officials. Bureaucracies that previously tended to be rigid and hierarchical need to transform to become more flexible, innovative, and adaptive to change. This requires strong commitment from leadership and support from all elements of the organization. Without a supportive cultural shift, digitalization will remain a tool without significantly impacting public administration performance. Furthermore, digitalization also opens up opportunities for broader collaboration between the government, the private sector, and the public. In the digital era, the boundaries between sectors are increasingly blurred, enabling synergy in the provision of public services. The government can utilize technology developed by the private sector to improve service quality, while the public can play an active role in providing input and innovation through digital platforms. This collaboration is key to realizing sustainable public administration reform (Profiroiu et al., 2024).

In the long term, digitalization has the potential to create a more adaptive and data-driven public administration system. By utilizing technologies such as big data and artificial intelligence, the government can conduct more in-depth analyses of the various problems faced by the public. This enables more informed and evidence-based decision-making. Furthermore, digitalization can also support the creation of a more proactive government system in anticipating future changes and challenges.

Thus, it can be concluded that digitalization has a significant impact on public administration reform. Digitalization not only improves efficiency, transparency, and service quality, but also drives fundamental changes in the way the bureaucracy operates. Despite facing various challenges, digitalization remains a strategic step that needs to be continuously developed to realize a modern, responsive, and public-interest-oriented government. Therefore, comprehensive efforts from various parties are needed to ensure that digitalization can provide optimal benefits in public administration reform.

CONCLUSION

The conclusion of this study indicates that the implementation of a public sector accounting information system plays a significant role in improving organizational performance. A well-integrated system can accelerate data processing, improve the accuracy of financial reports, and strengthen transparency and accountability in public financial management. Furthermore, the use of technology in accounting information systems also enables more accurate, data-driven decision-making, enabling public sector organizations to respond to environmental changes more adaptively and efficiently.

Furthermore, the effectiveness of a public sector accounting information system is heavily influenced by the quality of human resources, management support, and adequate technological infrastructure. Without user competence and strong organizational commitment, system implementation will not have an optimal impact on performance. Therefore, ongoing efforts to improve human resource capacity, strengthen policies, and invest in technology are needed so that accounting information systems can function optimally and contribute significantly to improving the performance of public sector organizations.

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