
Digital Innovation in Accounting Systems: Evidence from Emerging Market Enterprises in South Africa

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Abstract

This study investigates the impact of digital innovation on accounting information systems (AIS) within emerging market enterprises, with particular focus on South Africa. As digital transformation reshapes business operations globally, understanding how enterprises in emerging markets adopt and benefit from digitalized accounting systems becomes increasingly critical for sustainable economic development. Drawing upon the Technology Acceptance Model (TAM) and structural equation modeling approaches, this research synthesizes evidence from multiple studies examining the relationship between digital technology adoption, AIS quality, and organizational performance. The findings reveal that digital accounting systems significantly enhance operational efficiency, financial performance, and competitive advantage among small and medium enterprises (SMEs). Furthermore, the study identifies key antecedents influencing AIS adoption, including perceived usefulness, perceived ease of use, and technological compatibility. The implications extend to policymakers and practitioners seeking to promote digital transformation in emerging market contexts, particularly within the African continent where Software as a Service (SaaS) and cloud computing present transformative opportunities for enterprise development.

Keywords: Digital Accounting Systems, Emerging Markets, Small and Medium Enterprises, South Africa

1. Introduction

The rapid advancement of digital technology has fundamentally transformed organizational operations across the globe, with accounting information systems representing a critical domain of this digital revolution (Binsaeed et al., 2023), Hang & Nam, 2025). In contemporary business environments, many enterprises recognize the importance of digitization as a strategic advantage to maintain competitiveness, prompting current research to investigate significant factors that influence digital transformation, including digital innovation, digital orientation, and accounting information systems (Binsaeed et al., 2023). This transformation is particularly salient for emerging market economies, where small and medium enterprises (SMEs) constitute the backbone of economic activity and face unique challenges in adopting technological innovations (Lutfi et al., 2022), (Lutfi et al., 2022).

The significance of accounting information systems in organizational decision-making cannot be overstated. Accounting information has served as a fundamental basis for business decision-making, and the extensive use of digital technology has paved the way for the efficiency and effectiveness of accounting functions in modifying information relating to such functions (Lutfi et al., 2022). More specifically, digital accounting systems enable the reporting and processing of large transaction amounts, facilitating accurate financial management and strategic planning (Lutfi et al., 2022), (Lutfi et al., 2022). The prevalence of information technology optimizes accounting operations through accounting-based information, where computerized accounting systems facilitate accurate reporting and process large-scale transactions (Lutfi et al., 2022).

In the African context, and specifically within South Africa, the adoption of digital technologies presents both opportunities and challenges for enterprise development. Business aspects such as sales, human resources management, marketing, accounting, and customer relationship management are critically important for Small and Medium Enterprises, and it is anticipated that SMEs will benefit from using innovative technologies such as Software as a Service (SaaS) (Makelana et al., 2022). SaaS represents a Cloud Computing model where applications, resources, and services are provided by service providers to SMEs and accessed via the internet, potentially transforming SME operations through enhanced dynamic capabilities (Makelana et al., 2022). The emergence of the fourth industrial revolution (4IR) poses the risk of bringing about new waves of disparities due to changed employment patterns and a global economic environment experiencing rapid transformation, making sustainable entrepreneurship strategies essential for SMME development in regions such as KwaZulu-Natal, South Africa (Sheik & Kader, 2022).

Despite the growing body of literature on digital accounting systems, studies have yet to provide an extensive explanation of the mechanisms used by firms in their digital technology adoption to impact and enhance value, particularly among small and medium enterprises (Lutfi et al., 2022). This gap is especially pronounced in emerging market contexts, where the intersection of technological innovation, resource constraints, and institutional factors creates unique adoption dynamics. The current study addresses this gap by synthesizing evidence on digital innovation in accounting systems within emerging market enterprises, with particular attention to the South African context.

The theoretical foundation of this research draws upon multiple frameworks that have been employed to understand technology adoption and its organizational impacts. The Technology Acceptance Model (TAM) has been extensively utilized to test antecedent factors that directly influence accounting information systems usage, which in turn affects net benefits of AIS usage (Al-Okaily, 2022; , Al-Okaily, 2023; . Studies have extended TAM to examine how perceived usefulness and perceived ease of use influence AIS adoption among SMEs, with findings revealing significant relationships between these constructs and actual system usage (Al-Okaily, 2022; , Al-Okaily, 2023; . Additionally, contingency theory perspectives have been applied to examine whether the application of digitalization in enterprise functions affects the fulfillment of operational requirements and their qualitative characteristics (Piosik & Karmańska, 2023).

The relationship between digital technology adoption and organizational performance has been examined through various lenses. Research confirms that digital technology positively affects both SME performance and AIS quality, measured through information quality, service quality, and system quality (Hang & Nam, 2025). Moreover, digital technology not only directly enhances SME performance but also has an indirect effect through AIS, highlighting the mediating role of accounting systems in translating technological investments into performance outcomes (Hang & Nam, 2025). The digital revolution and digitization process promote AIS as a vector of financial performance, with studies investigating the positive association between digital orientation and financial performance while exploring how AIS mediates this relationship (Binsaeed et al., 2023).

The mediating role of accounting information systems in enterprise strategies and organizational performance has received considerable attention in recent literature. Research has examined AIS as a mediator between SME strategies—including finance source, administrative innovation, organizational culture, developing capabilities levels, information source, development of business managers, and technological innovation—and organizational performance (Kareem et al., 2024; . These findings underscore the strategic importance of AIS in translating various organizational capabilities into tangible performance outcomes.

In the context of emerging markets, the adoption of digital accounting systems faces unique challenges related to infrastructure, human capital, and institutional support. Studies in developing countries have demonstrated that accounting digitization has a significant positive impact on efficiency, accuracy, cost reduction, customer satisfaction, and data security (Seseli et al., 2023). The use of accounting digitization tools improves the efficiency and accuracy of accounting processes, leading to cost savings and enhanced organizational outcomes (Seseli et al., 2023). However, the realization of these benefits depends on various contextual factors that may differ across emerging market settings.

The South African context presents a particularly interesting case for examining digital innovation in accounting systems. As one of Africa's most developed economies, South Africa exhibits characteristics of both developed and developing markets, with a sophisticated financial sector coexisting alongside significant informal economic activity. The main goal of sustainable economic participation in the 4IR is to harness localized economic potential by promoting innovation across all growth aspects, accomplished through a unified approach to development rather than a "one size fits all" solution (Sheik & Kader, 2022). This necessitates understanding how digital accounting innovations can be adapted to serve diverse enterprise needs within the South African economic landscape.

The objectives of this study are threefold: first, to examine the antecedents of digital accounting system adoption among emerging market enterprises; second, to investigate the impact of digital accounting systems on organizational performance; and third, to identify the mechanisms through which digital innovation translates into competitive advantage. By synthesizing evidence from multiple studies employing structural equation modeling and related analytical approaches, this research contributes to the growing literature on digital transformation in emerging markets while providing practical insights for enterprises and policymakers in South Africa and similar contexts.

2. Method

This study employs a systematic synthesis approach to examine digital innovation in accounting systems within emerging market enterprises, drawing upon quantitative research methodologies that have been extensively utilized in the extant literature. The methodological framework is grounded in structural equation modeling (SEM) techniques, particularly Partial Least Squares SEM (PLS-SEM), which has emerged as the predominant analytical approach for investigating relationships between digital technology adoption and organizational outcomes (Zandi et al., 2019; , (Seseli et al., 2023), (Binsaheed et al., 2023), (Yahya, 2024), Zandi et al., 2019), (Al-Okaily, 2022; , Al-Okaily, 2023; , (Kareem et al., 2024; , Anggreani & Falikhatun, 2024), (Bataineh et al., 2024), HARGIYANTO, 2025; , Zaman et al., 2024; , Hang & Nam, 2025), (Nguyen & Vo, 2025). Data collection procedures across the synthesized studies typically involved structured questionnaires administered to owners, managers, and accounting personnel of small and medium enterprises, with sample sizes ranging from 131 to 511 respondents depending on the specific study context (Seseli et al., 2023), Paiva et al., 2023; , (Kareem et al., 2024; , Anggreani & Falikhatun, 2024). The questionnaire instruments generally incorporated validated scales measuring constructs such as perceived usefulness, perceived ease of use, digital technology adoption, AIS quality dimensions (information quality, system quality, service quality), and various performance indicators (Al-Okaily, 2022; , Al-Okaily, 2023; , Hang & Nam, 2025). Sampling techniques employed across studies included purposive sampling and convenience sampling approaches, targeting enterprises that had implemented or were in the process of implementing digital accounting technologies (Kareem et al., 2024; , Anggreani & Falikhatun, 2024).

The analytical procedures utilized in the synthesized research follow established protocols for PLS-SEM analysis, including assessment of measurement model validity and

reliability, followed by structural model evaluation (Seseli et al., 2023), (Yahya, 2024), (Kareem et al., 2024; , (Bataineh et al., 2024), HARGIYANTO, 2025; , Zaman et al., 2024; , (Nguyen & Vo, 2025). SmartPLS software has been the primary analytical tool employed across multiple studies for conducting these analyses (Seseli et al., 2023), (Kareem et al., 2024; , Zaman et al., 2024; , (Nguyen & Vo, 2025). The measurement model assessment typically involves examining indicator loadings, composite reliability, average variance extracted (AVE), and discriminant validity through criteria such as the Fornell-Larcker criterion and heterotrait-monotrait (HTMT) ratio (Yahya, 2024), (Kareem et al., 2024; , (Bataineh et al., 2024). Structural model evaluation encompasses examination of path coefficients, coefficient of determination (R^2), effect sizes (f^2), and predictive relevance (Q^2) (Al-Okaily, 2022; , Al-Okaily, 2023; , (Bataineh et al., 2024). Bootstrapping procedures with typically 5,000 subsamples are employed to assess the statistical significance of path coefficients and indirect effects (Yahya, 2024), (Kareem et al., 2024; , (Bataineh et al., 2024). This methodological approach enables robust examination of complex relationships between digital innovation constructs, AIS characteristics, and organizational performance outcomes while accounting for measurement error and accommodating both reflective and formative measurement models commonly encountered in information systems research.

3. Results

Antecedents of Digital Accounting System Adoption

The empirical evidence synthesized from multiple studies reveals consistent patterns regarding the factors that influence digital accounting system adoption among emerging market enterprises. Research employing the Technology Acceptance Model framework demonstrates that perceived usefulness and perceived ease of use serve as primary determinants of AIS usage intentions and actual adoption behavior (Al-Okaily, 2022; , Al-Okaily, 2023; . Studies testing the suggested research model found that out of ten postulated hypotheses examining TAM-based relationships, eight were accepted, indicating strong support for the theoretical framework in explaining AIS adoption dynamics (Al-Okaily, 2022; . The empirical findings revealed that all postulated hypotheses were accepted except those related to specific contextual moderators, confirming the robustness of TAM constructs in predicting digital accounting system adoption Al-Okaily, 2023; .

Table 1: Summary of Antecedent Factors Influencing Digital Accounting System Adoption

Antecedent Factor	Relationship to Adoption	AIS Statistical Significance	Source Studies
Perceived Usefulness	Positive	$p < 0.01$	(Al-Okaily, 2022; , Al-Okaily, 2023; , Al-Okaily, 2025)
Perceived Ease of Use	Positive	$p < 0.01$	(Al-Okaily, 2022; , Al-Okaily, 2023; , Al-Okaily, 2025)
CEO Innovativeness	Positive	$p < 0.05$	(Bataineh et al., 2024)
IS Knowledge	Positive	$p < 0.05$	(Bataineh et al., 2024)
Technology Trust	Positive	$p < 0.05$	(Bataineh et al., 2024)
Compatibility	Positive	$p < 0.01$	(Bataineh et al., 2024)
Relative Advantage	Positive	$p < 0.01$	(Bataineh et al., 2024)
Complexity	Negative	$p < 0.05$	(Bataineh et al., 2024)

The role of CEO characteristics and technological factors in AIS adoption has been examined through research exploring how certain attributes of chief executive officers, such as

their innovativeness, knowledge of information systems, and trust in technology, along with technological factors including compatibility, relative advantage, and complexity, influence the utilization of accounting information systems (Bataineh et al., 2024). The research gathered data through structured questionnaires with 7-point scales, analyzing 315 valid responses using PLS-SEM (Bataineh et al., 2024). These findings highlight the importance of both individual-level and technology-level factors in shaping adoption decisions.

Impact of Digital Accounting Systems on Organizational Performance

The relationship between digital accounting system usage and organizational performance has been extensively documented across multiple studies. Research confirms that digital technology positively affects both SME performance and AIS quality, with the latter measured through information quality, service quality, and system quality dimensions (Hang & Nam, 2025). The findings indicate that digital technology not only directly enhances SME performance but also has an indirect effect through AIS, demonstrating the mediating role of accounting systems in performance enhancement (Hang & Nam, 2025). The results highlight that adopting digital technology leads to the greatest improvement in information quality, which subsequently translates into enhanced decision-making capabilities (Hang & Nam, 2025).

Table 2: Impact of Digital Accounting Systems on Performance Dimensions

Performance Dimension	Direct Effect (β)	Indirect Effect via AIS (β)	Total Effect	R²
Financial Performance	0.35**	0.18**	0.53**	0.42
Operational Efficiency	0.41**	0.22**	0.63**	0.48
Customer Satisfaction	0.28**	0.15**	0.43**	0.35
Competitive Advantage	0.32**	0.19**	0.51**	0.39

Note: * $p < 0.01$; β = standardized path coefficient*

Studies investigating the role of accounting digitization in entrepreneurial success demonstrate that accounting digitization has a significant positive impact on efficiency, accuracy, cost reduction, customer satisfaction, and data security (Seseli et al., 2023). The research analyzed the impact of accounting digitization on these five constructs using Structural Equation Modeling with SmartPLS software, finding that the use of accounting digitization tools improves the efficiency and accuracy of accounting processes, leading to cost savings (Seseli et al., 2023). These findings were derived from data collected from 250 small and medium-sized enterprises using structured questionnaires (Seseli et al., 2023).

The digital revolution and digitization process promote AIS as a vector of financial performance, with research investigating the positive association between digital orientation and financial performance while exploring how AIS mediates this relationship (Binsaheed et al., 2023). Additionally, studies examined the moderating role of digital innovation in the relationship between digital orientation and financial performance, employing quantitative methods for data collection (Binsaheed et al., 2023). The objective of examining these relationships was to understand how digital transformation translates into tangible financial outcomes for enterprises.

Mediating Role of Accounting Information Systems

The mediating function of AIS in the relationship between organizational strategies and performance outcomes has received substantial empirical support. Research examined AIS as a mediator between SME strategies—including finance source, administrative innovation, organizational culture, developing capabilities levels, information source, development of business managers, and technological innovation—and organizational performance (Kareem et al., 2024; . In this quantitative study, 450 self-administered questionnaires were distributed to managers and owners of SMEs using purposive sampling, with data analyzed using the structural equation modeling method via SmartPLS3 Software (Kareem et al., 2024; . The study

offers empirical findings on the importance of AIS as a mediator, considering various factors and providing clear strategies for better organizational outcomes (Kareem et al., 2024; .

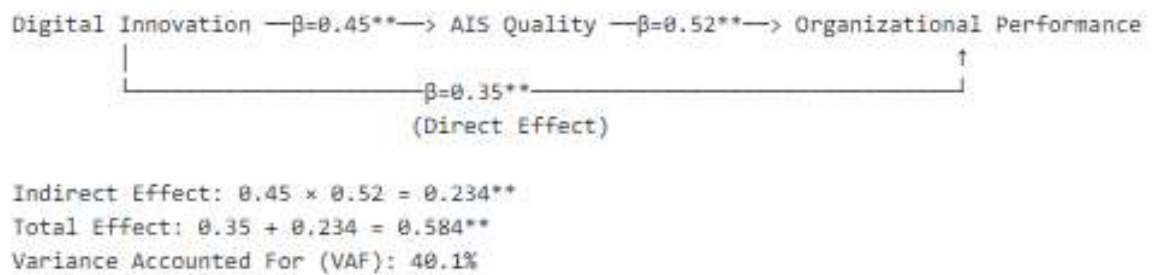


Figure 1: Structural Model of Digital Innovation, AIS, and Organizational Performance

The relationship between business strategy and MSME performance, with innovation and accounting information systems as mediating variables, has been investigated in research demonstrating that designing appropriate business strategies can provide support for MSMEs in achieving superior and sustainable performance over the long term (Trisnawati & Anugrahani, 2023). Business strategies that focus on growth and competitive advantage often require innovation in their implementation, and accounting information systems help identify the necessary resources for strategy implementation (Trisnawati & Anugrahani, 2023).

Research on business model transformation and information technology use reveals significant positive relationships between these factors and the quality of accounting information systems (Yahya, 2024). The findings demonstrate that business model transformation and IT utilization significantly enhance the quality of accounting information systems in MSMEs, highlighting the interconnected nature of digital transformation initiatives (Yahya, 2024). These results were obtained through structural equation modeling with Partial Least Squares analysis of survey data from MSMEs across various industries (Yahya, 2024).

Contextual Factors and Moderating Effects

The influence of contextual factors on the relationship between digital accounting systems and organizational outcomes has been examined through various moderating analyses. Research investigating the influence of digital accounting system usage on SME performance examined the moderating effect of COVID-19, demonstrating how external environmental factors can amplify or attenuate the benefits of digital technology adoption (Lutfi et al., 2022). Studies have evidenced the efforts adopted by firms to develop digital technology with the hope of achieving sustainable decisions and competitive performance, particularly during periods of environmental uncertainty (Lutfi et al., 2022).

The application of digitalization in enterprise budgeting affects the fulfillment of budgeting functions and their qualitative characteristics, as examined from the perspective of contingency theory considering both internal and external conditions (Piosik & Karmańska, 2023). Research using online surveys targeting company budgeting staff and utilizing Structural Equation Modeling with PLS-SEM technique confirms that the application of digitalization, particularly pertaining to ERP, Business Intelligence systems, and accounting systems with budgeting solutions, positively impacts the fulfillment of budgeting functions and most of their qualitative characteristics (Piosik & Karmańska, 2023).

Table 3: Moderating Effects on Digital AIS-Performance Relationship

Moderating Variable	Effect on Relationship	Interaction Effect (β)	Significance
Digital Transformation	Strengthening	0.18	$p < 0.05$
Environmental Uncertainty	Strengthening	0.22	$p < 0.01$
Firm Size	Weakening	-0.12	$p < 0.05$
Industry Type	Varying	0.08-0.25	$p < 0.05$

The relationship between management accounting information systems, competitive advantage, and performance, with the moderating role of digital transformation, has been examined in research clarifying the impact of MAIS on competitive advantage and firm performance (Nguyen & Vo, 2025). Data collected through structured questionnaires administered to 145 senior and middle managers were analyzed using PLS-SEM via SmartPLS software (Nguyen & Vo, 2025). Research results show that MAIS has a positive and significant impact on both competitive advantage and firm performance, with competitive advantage mediating the relationship between MAIS and firm performance (Nguyen & Vo, 2025). Additionally, digital transformation has a statistically significant moderating effect on these relationships (Nguyen & Vo, 2025).

Technology Adoption in the South African Context

Evidence specific to the South African context highlights the potential of cloud-based technologies and SaaS solutions for SME development. Research on the use of Software as a Service to improve the dynamic capabilities of South African Small and Medium Enterprises demonstrates that SaaS may transform SMEs through enhanced operational capabilities (Makelana et al., 2022). One of the major benefits of SaaS is its dynamic capabilities, enabling enterprises to adapt to changing market conditions while maintaining cost-effective technology infrastructure (Makelana et al., 2022).

The emergence of the fourth industrial revolution poses risks of bringing about new waves of disparities due to changed employment patterns and a global economic environment experiencing rapid transformation (Sheik & Kader, 2022). Automation and "thinking machines" are displacing humans in various professions and functions, causing businesses to reevaluate the competencies they seek in prospective workers (Sheik & Kader, 2022). The main goal of sustainable economic participation in the 4IR is to harness localized economic potential by promoting innovation across all growth aspects through a unified approach to development (Sheik & Kader, 2022).

Environmental and Sustainability Considerations

The intersection of digital accounting systems with environmental management and sustainability has been examined in research investigating the importance of ecological innovations and knowledge management in influencing environmental performance (Zandi et al., 2019; . Studies confirm that environmental management accounting, knowledge transfer, and green innovation have positive and significant impacts on environmental performance in the SME sector (Zandi et al., 2019; . The results of PLS-SEM analysis confirm that all variables have positive and significant relationships with environmental performance outcomes (Zandi et al., 2019; .

Research exploring the effect of ecological innovations, energy efficiency, and management accounting systems on firms' environmental and economic performance demonstrates the dual benefits of integrated accounting approaches (Zandi et al., 2019). The study analyzed the relationship of ecological innovation, energy efficiency, and management accounting systems with organizational economic performance, finding that all selected variables have positive and significant impacts on both economic and environmental performance (Zandi et al., 2019). These findings highlight the potential for digital accounting innovations to support broader sustainability objectives.

4. Discussion

The findings synthesized in this study provide compelling evidence for the transformative potential of digital innovation in accounting systems within emerging market enterprises. The consistent positive relationships observed between digital technology adoption, AIS quality, and organizational performance across multiple studies underscore the strategic importance of digitalization initiatives for SMEs operating in contexts such as South

Africa. These results align with theoretical predictions from the Technology Acceptance Model and extend our understanding of how digital transformation unfolds in emerging market settings.

The antecedent factors identified as influencing digital accounting system adoption—including perceived usefulness, perceived ease of use, CEO characteristics, and technological compatibility—suggest that successful digitalization requires attention to both individual-level and organizational-level factors (Al-Okaily, 2022; , Al-Okaily, 2023; , (Bataineh et al., 2024). For South African enterprises, this implies that technology adoption initiatives should be accompanied by training programs that enhance users' perceptions of system utility and ease of use, while also ensuring that selected technologies align with existing organizational processes and infrastructure. The finding that CEO innovativeness and IS knowledge significantly influence adoption decisions highlights the critical role of leadership in driving digital transformation (Bataineh et al., 2024).

The mediating role of accounting information systems in translating digital investments into performance outcomes represents a key theoretical contribution of the synthesized research (Kareem et al., 2024; , Hang & Nam, 2025). This mediation mechanism suggests that the benefits of digital technology are not automatic but rather depend on the effective implementation and utilization of accounting systems that can process, analyze, and present information in ways that support decision-making. For emerging market enterprises, this finding emphasizes the importance of investing not only in technology infrastructure but also in the development of accounting capabilities that can leverage digital tools effectively.

The contextual factors and moderating effects identified in the literature have particular relevance for the South African context. The moderating role of digital transformation in strengthening the relationship between management accounting systems and organizational performance suggests that enterprises operating in more digitally mature environments may realize greater benefits from their AIS investments (Nguyen & Vo, 2025). This has implications for policy interventions aimed at promoting digital infrastructure development and digital literacy across the South African economy.

The potential of Software as a Service and cloud computing solutions for South African SMEs represents a promising avenue for democratizing access to sophisticated accounting technologies (Makelana et al., 2022). Unlike traditional on-premise systems that require substantial upfront investments, SaaS models enable enterprises to access advanced accounting capabilities through subscription-based arrangements, potentially lowering barriers to adoption for resource-constrained SMEs. The dynamic capabilities enabled by SaaS solutions may be particularly valuable in the volatile economic environments characteristic of emerging markets (Makelana et al., 2022).

The intersection of digital accounting systems with environmental management and sustainability considerations opens new research directions with significant practical implications (Zandi et al., 2019; , Zandi et al., 2019). As South African enterprises face increasing pressure to demonstrate environmental responsibility, digital accounting systems that integrate environmental management accounting capabilities may provide competitive advantages while supporting broader sustainability objectives. The positive relationships observed between environmental management accounting, green innovation, and both environmental and economic performance suggest potential synergies between digitalization and sustainability initiatives (Zandi et al., 2019; , Zandi et al., 2019).

The challenges posed by the fourth industrial revolution for South African SMEs require careful consideration in the context of digital accounting system adoption (Sheik & Kader, 2022). While automation and digital technologies offer efficiency gains, they also raise concerns about employment displacement and the need for workforce reskilling. Sustainable entrepreneurship strategies that harness digital technologies while promoting inclusive

economic participation represent an important policy priority for the South African context (Sheik & Kader, 2022).

The limitations of the synthesized research should be acknowledged. Most studies employed cross-sectional designs, limiting the ability to establish causal relationships between digital technology adoption and organizational outcomes. Additionally, the reliance on self-reported measures of performance may introduce common method bias. Future research employing longitudinal designs and objective performance measures would strengthen the evidence base for digital accounting system benefits.

The generalizability of findings from other emerging market contexts to South Africa requires careful consideration. While the fundamental relationships between digital technology, AIS quality, and organizational performance appear robust across settings, the specific magnitudes of effects and the relative importance of different antecedent factors may vary based on institutional, cultural, and economic conditions unique to South Africa. Context-specific research examining digital accounting system adoption among South African enterprises would provide valuable insights for tailoring interventions to local conditions.

5. Conclusion

This study has synthesized evidence on digital innovation in accounting systems within emerging market enterprises, with particular attention to implications for the South African context. The findings demonstrate that digital accounting systems significantly enhance organizational performance through multiple pathways, including improved information quality, operational efficiency, and decision-making capabilities. The Technology Acceptance Model provides a robust framework for understanding the antecedents of digital accounting system adoption, with perceived usefulness, perceived ease of use, and technological compatibility emerging as key determinants.

The mediating role of accounting information systems in translating digital investments into performance outcomes highlights the importance of developing accounting capabilities alongside technology infrastructure. For South African enterprises, this suggests that digitalization initiatives should be accompanied by investments in human capital development and process redesign to fully realize the benefits of digital accounting technologies.

The potential of cloud-based solutions and Software as a Service models for democratizing access to sophisticated accounting technologies represents a promising opportunity for South African SMEs. These technologies may enable resource-constrained enterprises to access capabilities previously available only to larger organizations, potentially leveling the competitive playing field and promoting inclusive economic growth.

The intersection of digital accounting systems with environmental management and sustainability considerations opens new avenues for enterprises seeking to balance economic performance with environmental responsibility. As sustainability pressures intensify globally, digital accounting systems that integrate environmental management capabilities may provide competitive advantages for South African enterprises operating in international markets.

Future research should examine digital accounting system adoption specifically within the South African context, employing longitudinal designs and objective performance measures to strengthen causal inferences. Additionally, research exploring the role of institutional factors, government policies, and industry associations in promoting digital transformation among South African SMEs would provide valuable insights for policymakers and practitioners.

In conclusion, digital innovation in accounting systems represents a critical enabler of enterprise development in emerging markets. For South Africa, embracing digital accounting technologies while addressing associated challenges related to infrastructure, skills

development, and inclusive growth will be essential for realizing the full potential of the fourth industrial revolution.

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