

Management accounting: a research review of evolution, theoretical foundations, contemporary issues, and future directions

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<https://doi.org/10.33003/fujafr-2026.v4i3.413.189-202>

Abstract

Purpose: This study reviews the evolution of management accounting, its theoretical foundations, contemporary practices, emerging technological influences, and future directions. It specifically examines how management accounting has transitioned from a traditional cost-control function to a strategic tool for organizational decision-making and performance.

Methodology: A qualitative narrative review was conducted using scholarly literature published between 2016 and 2026. Relevant publications were identified through Scopus, Web of Science, ScienceDirect, Emerald Insight, JSTOR, and Google Scholar using keywords related to management accounting, strategic management accounting, digital transformation, big data analytics, and organizational performance. Relevant studies were selected based on their alignment with the study objectives, publication period, and scholarly relevance, while duplicates and unrelated publications were excluded. The selected literature was analyzed thematically.

Results and conclusion: The review indicates that management accounting has evolved through globalization, technological advancement, and changing organizational demands. Its theoretical development is informed by contingency, institutional, agency, and resource-based perspectives. Contemporary practices increasingly incorporate big data analytics, artificial intelligence, sustainability accounting, and digital technologies, while management accountants are assuming broader strategic roles. The study concludes that continued technological and environmental changes will further reshape management accounting practices.

Implication of findings: The findings highlight the need for organizations and management accounting professionals to strengthen digital competencies, integrate emerging technologies, and adapt accounting practices to support strategic decision-making and sustainable organizational performance.

Keywords: Management Accounting, Strategic Management Accounting, Digital Transformation, Big Data Analytics, Sustainability Accounting.

Introduction

Management accounting has evolved considerably from its traditional emphasis on cost determination, budgeting, variance analysis, and financial control to a broader function that supports strategic decision-making, performance management, resource allocation, and organizational value creation. This evolution has been influenced by increasing business complexity, globalization, competitive pressures, changing organizational structures, and advances in information technology. Contemporary management accounting therefore incorporates conventional techniques alongside strategic management accounting, performance measurement, business analytics, sustainability-oriented accounting, and technology-enabled decision support (Azzumar et al., 2018; Abeygunasekera et al., 2018; Andreassen, 2020; Möller et al., 2020; Krisnadewi et al., 2023). Recent reviews indicate that this expansion has accelerated as organizations increasingly integrate digital technologies, artificial intelligence, big data, and advanced analytics into accounting and managerial processes (Barreto et al., 2025; Abbas, 2026; Elawadly, 2026).

The development of management accounting has also reflected changes in the information needs of organizations. Traditional systems were primarily concerned with internal cost control and operational planning, whereas contemporary practices increasingly connect accounting information with strategic planning, organizational performance, process improvement, and competitive positioning. Business process management, for example, has strengthened the relationship between accounting information and organizational processes by emphasizing the use of accounting information for process evaluation, cost management, and operational improvement (Abeygunasekera et al., 2018). Similarly, management accounting information systems have increasingly been examined in relation to organizational strategy, managerial responsibilities, and environmental uncertainty (Azzumar et al., 2018). These developments have broadened the role of management accounting from the preparation of internal financial information to participation in strategic and organizational decision-making (Andreassen, 2020; Möller et al., 2020).

The theoretical foundations of management accounting research are similarly diverse. Rather than operating under a single universally applicable theoretical framework, management accounting research draws on perspectives such as contingency theory, institutional theory, agency theory, and the resource-based view to explain differences in the design, adoption, use, and effectiveness of management accounting systems. These perspectives emphasize the influence of organizational circumstances, institutional pressures, information asymmetry, resources, capabilities, and strategic objectives on accounting practices. Recent management accounting research continues to demonstrate the importance of contextual and organizational factors in explaining changes in accounting practices, particularly as organizations respond to technological and environmental changes (Krisnadewi et al., 2023; Möller et al., 2020; Abbas, 2026). The multiplicity of these perspectives further demonstrates the interdisciplinary character of management accounting and the need to examine its development beyond conventional accounting boundaries.

Digital transformation has become one of the most prominent contemporary developments in management accounting. Enterprise resource planning systems, cloud computing, big data analytics, business intelligence, robotic process automation, blockchain, machine learning, and artificial intelligence are changing how accounting information is generated, processed, interpreted, and communicated (Andreassen, 2020; Möller et al., 2020; Abdelhalim, 2024). Barreto et al. (2025), in a systematic review of 140 studies, identified artificial intelligence and blockchain, information technology and cloud computing, big data, and business intelligence as major research areas linking management accounting and digital technologies. Abbas (2026), based on a review of 91 studies, further demonstrated the increasing attention given to machine learning, deep learning, explainable artificial intelligence, generative artificial intelligence, and large language models in management accounting. Elawadly (2026) similarly identified analytics and big data, integrated digital technologies, and artificial intelligence in decision-making as major themes in the digitalization of management accounting literature. These developments are also reshaping the management accountant's role by increasing the demand for analytical, technological, strategic, and data-related competencies.

Sustainability has emerged as another important dimension of contemporary management accounting. Increasing attention to environmental risks, social responsibilities, corporate governance, resource efficiency, and stakeholder expectations has expanded the information requirements of organizations beyond conventional financial measures. Environmental management accounting and sustainability-related accounting practices provide mechanisms for incorporating environmental and social information into managerial planning, control, and decision-making (Swalih et al., 2024; Antonini, 2024). This development is particularly relevant within the Nigerian accounting environment. Bamigboye and Alagbe (2026), using evidence from 35 listed Nigerian manufacturing companies over 2013–2024, examined sustainability disclosure and firm value and found that the effects differed across environmental, social, and governance dimensions. Similarly, Essien et al. (2026), using evidence from Nigerian listed financial firms, found that ESG disclosure practices were significantly associated with firm value, with differences across environmental, social, and governance dimensions. These recent Nigerian studies demonstrate

the increasing relevance of sustainability information, disclosure, and accountability within the country's corporate and accounting environment.

The transformation of management accounting is consequently accompanied by changing professional expectations. Management accountants are increasingly required to contribute to strategic planning, data analysis, performance evaluation, risk assessment, process improvement, sustainability initiatives, and technology-driven decision-making rather than concentrating exclusively on routine accounting activities (Andreassen, 2020; Möller et al., 2020; Barreto et al., 2025; Abbas, 2026). The strategic orientation of accounting is also evident in recent Nigerian research. Sa'id et al. (2026), for example, examined strategic management, ICT, resource allocation, stakeholder engagement, and monitoring within a Nigerian university context, illustrating the growing intersection between accounting-related decision processes, strategic management, ICT, innovation, and organizational sustainability.

Despite the expanding body of literature, management accounting research remains dispersed across historical development, theoretical explanations, digital transformation, sustainability, organizational performance, and changing professional roles. Existing reviews have examined specific aspects of these developments, particularly digital technologies and artificial intelligence (Barreto et al., 2025; Abbas, 2026; Elawadly, 2026), while recent Nigerian studies have increasingly examined sustainability disclosure, ESG practices, strategic management, and organizational value (Bamigboye & Alagbe, 2026; Essien et al., 2026; Sa'id et al., 2026). However, there remains a need for an integrated review that connects the evolution and theoretical foundations of management accounting with its contemporary technological, sustainability, organizational, and professional developments.

Hence, this study therefore reviews management accounting literature, synthesizing evidence on its evolution, theoretical foundations, contemporary practices and challenges, technological transformation, sustainability orientation, changing professional roles, and future directions. The review contributes to a broader understanding of how management accounting continues to adapt to changing organizational, technological, and environmental conditions.

Concept of Management Accounting

Management accounting refers to the process of identifying, measuring, analyzing, interpreting, and communicating financial and non-financial information for managerial decision-making and organizational control. Unlike financial accounting, which focuses mainly on external reporting, management accounting is internally oriented and supports planning, budgeting, performance evaluation, and strategic management within organizations (Kabir, 2019). Over time, management accounting has evolved from traditional cost accounting techniques into a broader strategic and technology-driven discipline that contributes significantly to organizational competitiveness and sustainability.

Evolution of Management Accounting

Management accounting has continuously evolved in response to changing organizational structures, competitive pressures, technological developments, and managerial information requirements (Maher, 2001). Its traditional emphasis on cost measurement, budgeting, and operational control has progressively expanded toward strategic analysis, performance management, and decision support. This transformation reflects the increasing need for accounting information that is timely, relevant, and aligned with organizational strategy and competitive objectives (Ojra et al., 2021; Alawattage and Wickramasinghe, 2022). The emergence of the digital economy has further accelerated this evolution through the adoption of big data analytics, cloud computing, automation, artificial intelligence, and other digital technologies that have changed how accounting information is generated, processed, and used (Aldabbous & Riyath, 2024; Arkhipova et al., 2024). These developments have also broadened the responsibilities of management accountants, increasing the importance of analytical, technological, and strategic competencies within the profession (Arkhipova et al., 2024; Oktaviyah, 2025). Recent evidence further shows that artificial intelligence is extending management accounting beyond routine information processing toward

advanced analysis and decision support while simultaneously creating new requirements relating to skills, ethics, data governance, and professional roles (Abbas, 2026). Thus, the evolution of management accounting represents a continuing shift from conventional cost and control functions toward an integrated discipline that combines strategic, technological, analytical, and organizational capabilities.

Strategic Management Accounting

One important concept within management accounting is strategic management accounting (SMA). Strategic management accounting involves the provision and analysis of accounting information relating to an organization's competitors, markets, and long-term strategic positioning (Duci, 2021). Unlike traditional management accounting, which focuses mainly on internal operational efficiency, strategic management accounting emphasizes external business environments, competitive advantage, and strategic planning. The concept integrates accounting information with business strategy to improve organizational performance and sustainability.

Strategic Cost Management

Strategic cost management is another major concept associated with management accounting. Strategic cost management focuses on identifying and controlling costs in ways that support long-term organizational objectives and competitive strategies. Duci (2021) noted that strategic cost management allows organizations to improve profitability through efficient resource utilization, cost reduction, and value creation. This concept is particularly important in highly competitive industries where organizations seek to maintain cost leadership and operational efficiency.

Information Technology and Management Accounting

The emergence of digital technologies has transformed management accounting practices by improving the generation, processing, and analysis of accounting information. Information technology tools such as enterprise resource planning systems, cloud computing, artificial intelligence, big data analytics, and machine learning increasingly support accounting information systems and managerial decision-making. Kusuma and Shulthoni (2021) argued that technological advancement improves management accounting processes by enhancing the speed, accuracy, and reliability of financial information. Similarly, Cleary et al. (2022) found that information technology positively influences management accounting practices and contributes to the performance of small and medium enterprises (SMEs). More recent studies indicate that digital technologies are extending these benefits through real-time information processing, data analytics, automation, predictive analysis, and improved strategic decision support (Aldabbous & Riyath, 2024; Arkhipova et al., 2024; Barreto et al., 2025). Artificial intelligence and machine learning, in particular, are increasingly being applied to automate routine activities and support forecasting and managerial analysis, although their adoption also creates concerns regarding data security, privacy, ethics, and professional skills (Abbas, 2026; Elawadly, 2026). Thus, information technology continues to strengthen management accounting by making accounting information more timely, accessible, analytical, and useful for contemporary organizational decision-making.

Big Data Analytics in Management Accounting

Big data analytics has become an important concept in modern management accounting. Organizations increasingly rely on large volumes of structured and unstructured data to improve forecasting, budgeting, strategic planning, and risk management. Li and Zhao (2018) explained that the era of big data presents both opportunities and challenges for management accounting. On one hand, big data enhances predictive analysis and strategic decision-making; on the other hand, it creates challenges related to data security, information overload, and technological adaptation. Likewise, Nielsen (2022) emphasized that exploratory data analysis and machine learning are becoming essential components of management accounting systems in contemporary organizations.

Management Accounting and Organizational Performance

Management accounting systems provide managers with information and tools for evaluating organizational efficiency, profitability, productivity, and operational effectiveness. Practices such as budgeting, performance measurement, and variance analysis can support managerial planning, monitoring, and corrective actions. Dahal (2022) reported a positive relationship between management accounting practices and organizational performance, particularly through improved managerial decision-making. However, evidence of performance benefits should be interpreted as an association rather than direct causal evidence, as outcomes may vary according to organizational characteristics, management practices, and the effective use of accounting information. Thus, the contribution of management accounting to organizational performance depends not only on the availability of accounting information but also on how effectively managers use it in organizational decision-making.

Management Accounting in SMEs

Management accounting also plays an important role in small and medium-sized enterprises (SMEs). Dlamini and Schutte (2021) developed a management accounting framework specifically designed for SMEs operating in emerging economies. The study emphasized that SMEs require flexible and simplified accounting systems that support decision-making, cost control, and sustainability. Mihalciuc (2022) similarly observed that implementing management accounting practices significantly improves SME performance through better planning, monitoring, and resource management.

Management Accounting and Innovation

Management accounting has become increasingly linked with innovation and product development. Magnacca and Giannetti (2024) identified the importance of management accounting in supporting new product development processes through budgeting, cost estimation, profitability analysis, and strategic evaluation. This demonstrates the expanding role of management accounting beyond traditional financial control into innovation management and strategic organizational growth.

Globalization and Management Accounting

Globalization has further influenced management accounting concepts and practices. Mazina (2018) explained that globalization has encouraged the harmonization and modernization of management accounting principles across nations. Organizations operating in international markets require accounting systems capable of supporting global operations, strategic alliances, and cross-border decision-making. Lindholm et al. (2017) also emphasized that management accounting and control systems are essential for profitability-driven service business development in global operations.

Management Accounting in Healthcare

The healthcare sector has also witnessed increasing application of management accounting concepts. Churikov (2021) explained that management accounting in healthcare supports cost management, budgeting, performance measurement, and resource allocation within health institutions. Healthcare organizations rely on management accounting systems to improve efficiency, service quality, and financial sustainability.

Theoretical Review

Contingency Theory

Contingency theory is one of the important theories underpinning management accounting. The theory argues that there is no universally appropriate accounting system suitable for all organizations because organizational effectiveness depends on situational factors such as business strategy, technology, organizational structure, and environmental uncertainty (Donaldson, 2001). Dahal et al. (2020) explained that management accounting systems become more effective when they align with organizational conditions and managerial decision-making needs. In management accounting, the theory therefore helps explain how organizational context influences the design and use of accounting systems and why organizations adopt different accounting techniques depending on their operational environments and strategic objectives.

Contingency theory is also relevant in explaining the adoption of technological innovations in management accounting. Cleary et al. (2022) noted that the effectiveness of management accounting practices in SMEs depends significantly on the integration of appropriate information technology tools. Organizations operating in technologically advanced environments may require sophisticated accounting systems capable of supporting strategic analysis and operational efficiency. Thus, contingency theory provides a link between organizational conditions, technology adoption, and the effectiveness of management accounting practices.

Institutional Theory

Institutional theory explains how organizations adopt accounting practices in response to external pressures such as regulations, professional standards, competition, and social expectations. The theory is associated with the view that organizations may adopt similar practices because of coercive, normative, and mimetic pressures (DiMaggio & Powell, 1983). Organizations may therefore implement modern accounting techniques to gain legitimacy, improve reputation, and conform to industry norms. Kabir (2019) explained that changes in management accounting practices are influenced by economic, cultural, and institutional factors within organizations and societies.

Institutional theory also helps explain the globalization of management accounting systems. Mazina (2018) argued that globalization has encouraged organizations to harmonize management accounting principles and practices across different countries. International organizations increasingly adopt standardized accounting systems to improve operational coordination, transparency, and competitiveness. The theory therefore complements contingency theory by emphasizing the influence of external institutional pressures in addition to internal organizational conditions.

Agency Theory

Agency theory focuses on the relationship between principals, such as owners or shareholders, and agents, such as managers. The foundational work of Jensen and Meckling (1976) explains how differences in interests and information between principals and agents can create agency problems. Management accounting systems therefore serve as monitoring and control mechanisms that reduce information asymmetry and improve accountability. Budgeting, performance evaluation, internal controls, and cost management systems help organizations monitor managerial performance and align managerial actions with organizational interests. Agency theory consequently explains the control and monitoring role of management accounting, particularly where managerial interests may differ from those of owners.

Stewardship Theory

Stewardship theory provides an alternative perspective to agency theory by viewing managers as stewards whose actions are directed toward organizational rather than purely personal objectives (Davis et al., 1997). Unlike agency theory, stewardship theory assumes that managers can be motivated by trust, commitment, organizational goals, and collective interests. Management accounting systems under this perspective emphasize collaboration, strategic planning, trust, and organizational improvement rather than strict monitoring and control. Lindholm et al. (2017) emphasized that management accounting and control systems can support profitability-driven organizational development through strategic coordination and performance management. Stewardship theory therefore complements agency theory by explaining management accounting in settings where cooperation, trust, and shared organizational objectives are important.

Resource-Based Theory

Resource-Based Theory (RBT) argues that organizations can achieve competitive advantage by effectively utilizing valuable, rare, and difficult-to-imitate resources (Barney, 1991). Management accounting systems support resource optimization by providing information on costs, performance, productivity, and resource utilization. Dlamini and Schutte (2021) highlighted that SMEs in emerging economies require effective management accounting frameworks to optimize limited resources and improve competitiveness. RBT therefore explains how management accounting

information can contribute to the effective deployment of organizational resources and the development of competitive capabilities.

Technology Acceptance Model

The Technology Acceptance Model (TAM), developed by Davis (1989), explains users' acceptance and adoption of information technologies based primarily on perceived usefulness and perceived ease of use. The model is relevant to management accounting because the effectiveness of digital accounting systems depends partly on whether accounting professionals and managers perceive such technologies as useful and easy to operate. Kusuma and Shulthoni (2021) explained that technological developments in management accounting have improved the effectiveness and efficiency of accounting systems. Similarly, Li and Zhao (2018) argued that big data analytics creates opportunities for improved strategic decision-making, although organizations must overcome technological and implementation challenges. TAM therefore helps explain the individual-level adoption of digital accounting systems, complementing contingency and institutional perspectives that focus more strongly on organizational and environmental influences.

Knowledge-Based Theory

The Knowledge-Based Theory of the Firm views knowledge as a strategic organizational resource that contributes to innovation, decision-making, and competitive advantage (Grant, 1996). Modern management accounting systems generate and distribute organizational knowledge through data analytics, performance reporting, and strategic information systems. Nielsen (2022) emphasized that exploratory data analysis and machine learning contribute significantly to knowledge creation and strategic analysis within organizations. Knowledge-Based Theory therefore explains the role of management accounting in transforming accounting data into organizational knowledge that can support learning, analysis, and strategic decision-making.

Innovation Theory

Innovation theory supports management accounting practices related to new product development and organizational transformation. Schumpeter's (1934) foundational perspective views innovation as an important driver of economic and organizational development. Magnacca and Giannetti (2024) explained that management accounting contributes to innovation processes through budgeting, performance evaluation, profitability analysis, and strategic cost management. Organizations use accounting information to evaluate innovative projects, assess risks, and allocate resources effectively. Innovation theory therefore links management accounting with organizational change and the financial evaluation of innovative activities.

Human Capital Theory

Human Capital Theory views employees' knowledge, skills, and competencies as resources that contribute to organizational productivity and performance (Becker, 1964). The theory is increasingly relevant to management accounting because digital transformation requires accounting professionals to develop analytical, technological, and strategic competencies. Ghani and Muhammad (2019) observed that Industry 4.0 technologies require accounting professionals to possess advanced digital, analytical, and strategic skills. Organizations therefore invest in employee training and professional development to improve accounting capabilities and organizational productivity. Human Capital Theory consequently complements the technology and knowledge perspectives by emphasizing the people and skills required to effectively use modern management accounting systems.

Empirical Review

Empirical research on management accounting has examined its relationship with organizational performance, managerial decision-making, information technology, strategic management, and emerging digital technologies across different institutional and geographical contexts. The studies differ substantially in research design, sample characteristics, variables, and analytical techniques, making direct comparison important. Despite these differences, a broad pattern of evidence suggests that management accounting practices can support organizational decision-making and performance when the information generated is relevant, timely, and appropriately

integrated into managerial processes. However, the strength and direction of these relationships vary according to organizational size, industry, technological environment, managerial capabilities, and the specific management accounting practices examined.

Dahal et al. (2020) investigated management accounting practices and organizational performance in Nepalese manufacturing firms. Using primary data collected through structured questionnaires from employees of selected manufacturing companies, the study examined the scope of traditional and contemporary management accounting practices and their association with organizational performance. Related work by Dahal et al. (2022) examined whether rationalized managerial decisions mediated the relationship between management accounting practices and organizational performance using survey data from 221 respondents from seven listed manufacturing companies and structural equation modelling. The studies generally indicate that management accounting practices are relevant to organizational performance and managerial decision-making, although the evidence also demonstrates the continuing importance of traditional practices alongside contemporary techniques. The use of survey-based designs, however, means that the findings are primarily based on respondents' perceptions rather than longitudinal organizational performance data.

Dlamini and Schutte (2021) approached the subject differently by developing a management accounting framework for SMEs operating in emerging economies. Rather than testing a conventional statistical relationship between management accounting practices and performance, the study responded to the limited and inconsistent adoption of management accounting practices among SMEs by proposing a framework suited to emerging-economy conditions. This approach complements the empirical performance studies by demonstrating that the availability and usefulness of management accounting practices are also influenced by the characteristics and resource limitations of smaller enterprises. The study therefore highlights the importance of contextualizing management accounting rather than assuming that practices developed in large or developed-economy organizations can be transferred directly to SMEs in emerging economies.

Research examining technology and management accounting provides further evidence that the usefulness of accounting practices increasingly depends on the technological environment in which they operate. Cleary et al. (2022) examined the links between IT tools, management accounting practices, and SME performance using survey evidence based on the perceptions of 109 CFOs in Irish SMEs. The study focused on management accounting practices including costing, budgeting, and performance management and examined their perceived contribution to SME performance. The study provides evidence of the importance of integrating IT tools with management accounting activities, but its reliance on CFO perceptions and a single national SME context limits direct generalization to other organizational environments.

Kusuma and Shulthoni (2021) examined the development of information technology in management accounting and emphasized the changing role of technology in the generation and use of management accounting information. Their study was primarily analytical and literature-oriented rather than a large-scale organizational performance test. Similarly, Li and Zhao (2018) examined the opportunities and challenges created by big data for management accounting through a conceptual and analytical discussion of changes in data collection, processing, and managerial decision-making.

Kabir (2019) provides evidence from Bangladesh on the changing nature of management accounting practices in manufacturing industries. Using listed manufacturing companies as the study population and applying factor-reduction techniques, the study examined factors associated with changes in management accounting practices. The findings indicate a movement from predominantly operational changes toward greater emphasis on strategic decision-making, with changes in business and organizational strategy and developments in manufacturing and information technology identified among the factors influencing this transformation. This evidence supports the broader argument that management accounting evolves in response to organizational strategy and technological

change, while also demonstrating that the nature of this evolution is influenced by the institutional and industrial environment.

Nielsen (2022) extended the technological discussion to exploratory data analysis and unsupervised machine learning. Rather than collecting primary organizational data, the study reviewed academic publications, professional accounting-body materials, and consulting reports published between 2015 and 2021. The review identified limited practical examples of machine-learning applications in management accounting compared with other business disciplines and highlighted the need for greater attention to data analytics and machine learning in management accounting research and education. This finding is important because it reveals a gap between the theoretical potential of advanced analytics and its documented application within management accounting.

Magnacca and Giannetti (2024) similarly adopted a systematic literature review approach to examine the relationship between management accounting and new product development. Their review synthesized existing studies rather than collecting new primary data and identified fragmentation arising from different research settings, research questions, and methodological approaches. The study is particularly relevant to the present review because it demonstrates that management accounting research is characterized by methodological and contextual diversity. It also supports the need for reviews that synthesize findings across technical, strategic, organizational, and behavioural dimensions rather than treating individual management accounting practices as isolated phenomena.

The Nigerian evidence provides a particularly relevant developing-economy perspective. Israel and Patrick (2020) examined the relationship between advanced manufacturing technology and management accounting practices in Nigerian manufacturing firms, demonstrating the relevance of technological conditions to the adoption and use of management accounting practices. More recent Nigerian evidence provides a broader range of research designs and findings. Ebhota et al. (2024), for example, examined 825 SMEs in South-West Nigeria using Partial Least Squares Structural Equation Modelling (PLS-SEM). The study incorporated digital transformation, big data analytics, customer experience, budgeting, budgetary control, and financial performance, thereby providing evidence of the interconnectedness of digitalization and conventional management accounting processes.

Mohammed et al. (2024) examined digital accounting systems and SME performance in Plateau State, Nigeria, using survey data from 500 SMEs and simple linear regression. The study reported a significant relationship between digital accounting systems and SME performance. Although the study supports the positive contribution of digital accounting, its single-state focus and cross-sectional survey design differ from the larger multi-location and structural modelling approach used by Ebhota et al. (2024). This methodological difference is important because the studies provide evidence from different organizational populations and analytical levels.

Umoru (2024) provides a contrasting Nigerian perspective. Using questionnaire-based survey data from SMEs in Edo State and descriptive analysis through SPSS, the study examined the usefulness of management accounting information, digital inclusion, and SME performance. The findings indicated that management accounting information was not adequately utilized by SMEs and that digital tools were not fully exploited or, in some cases, did not significantly influence performance. This result contrasts with the generally positive relationships reported by Ebhota et al. (2024) and Mohammed et al. (2024), suggesting that digitalization alone does not guarantee improved performance. Organizational capability, adoption intensity, managerial utilization, and the quality of information available may influence whether technological investments generate meaningful management accounting benefits.

Further Nigerian evidence strengthens this methodological and contextual comparison. Akinleye and Jimoh (2025) examined management accounting practices and financial performance among 10 listed manufacturing companies using ten-year panel data covering 2014–2023. The study employed descriptive statistics and regression techniques comprising pooled ordinary least squares, fixed-effects, and random-effects models. The study examined selling

and distribution costs, personnel costs, and production costs in relation to financial performance. Unlike the cross-sectional questionnaire studies conducted among SMEs, the use of panel data enabled the researchers to incorporate variation across firms and over time. The findings showed that selling and distribution costs had a positive and significant relationship with return on assets, while the effect of production costs varied across model specifications.

Court and Chinda (2025) also examined Nigerian SMEs, focusing on management accounting practices and financial performance in Rivers State. The study adopted a descriptive research design involving 63 SMEs selected from a population of 74 registered firms. Primary data were collected through structured questionnaires from management accountants, budget officers, and finance managers, while secondary information was obtained from organizational records. Multiple regression was used as the principal analytical technique to examine practices such as activity-based costing and budgeting in relation to financial performance. The study therefore combines perceptual primary data with organizational records, providing a different methodological approach from studies relying exclusively on questionnaire responses.

Ajape and Adelowotan (2025) examined digital accounting practices and financial performance in seven Nigerian deposit money banks. The study employed a survey design and stratified sampling to select seven internationally authorized deposit money banks, with 396 employees providing questionnaire responses. Data were analyzed using descriptive statistics and linear regression in SPSS. The study examined data analytics, automated bookkeeping, machine learning, cloud-based accounting systems, and blockchain technology as dimensions of digital accounting practices, with return on assets as the performance indicator. The findings indicated positive and statistically significant relationships between the examined digital accounting practices and financial performance. This evidence extends the Nigerian literature beyond SMEs and manufacturing firms to the banking sector, although the use of employee perceptions and cross-sectional data again limits causal interpretation.

Aderinto (2025) examined accounting record-keeping and business performance among SMEs across Nigeria. The study adopted a survey research design, drawing a sample of 278 SMEs from the Nigerian geopolitical zones from a stated population of 670,447 SMEs. Structured questionnaires were used to collect primary data, while frequency distributions, chi-square testing, and simple linear regression were applied to the research questions and hypotheses. The study reported that accounting record-keeping was significantly associated with improved business performance. Although the study does not focus specifically on advanced management accounting or digital technologies, it demonstrates the continuing relevance of basic accounting information practices to SME performance and provides evidence from a geographically broader Nigerian population.

Other studies broaden the empirical discussion beyond manufacturing and SMEs. Churikov (2021) examined management accounting in state-financed healthcare institutions in the Voronezh Oblast using grouping, comparison, analysis, and generalization of existing management accounting practices. The study illustrates the importance of designing management accounting indicators in response to sector-specific regulatory and organizational conditions. Mihalciuc (2022), in contrast, examined management accounting practices and SME performance in the manufacturing sector, emphasizing the usefulness of financial and non-financial management accounting information for planning, control, and decision-making. These studies demonstrate that management accounting practices are not applied uniformly across sectors and that organizational and regulatory environments influence the form and usefulness of management accounting information.

Lindholm et al. (2017) further demonstrated the organizational dimension of management accounting through an interventionist case study of global operations and service-business development. The case-based approach differs from the survey and regression studies that dominate more recent empirical research and provides insight into how management accounting and control can be integrated into organizational change and strategic development. Ghani and Muhammad (2019) added a human-capital perspective by examining employer expectations of accounting graduates in the context of Industry 4.0. Their qualitative orientation emphasizes the changing

competencies required by accounting professionals as organizations adopt increasingly digital production and information systems. These studies suggest that technological transformation affects not only accounting systems and organizational performance but also the roles, skills, and capabilities required of management accountants.

Methodology

This study adopted a qualitative narrative review design to examine literature on management accounting, with emphasis on its evolution, theoretical foundations, contemporary practices, technological developments, and future directions. Secondary data were obtained from scholarly publications, including journal articles, textbooks, and conference papers published between 2016 and 2026.

Literature was searched through Scopus, Web of Science, ScienceDirect, Emerald Insight, JSTOR, and Google Scholar using keywords such as “management accounting,” “strategic management accounting,” “management accounting practices,” “big data analytics,” “digital accounting systems,” and “organizational performance.” Publications were included based on their relevance to the study objectives, publication period (2016–2026), availability in English, and scholarly relevance. Duplicates and publications unrelated to the study focus were excluded.

The selected literature was analyzed thematically, with individual publications serving as the unit of analysis. Findings were coded and grouped into major themes, including management accounting evolution, theoretical foundations, strategic management accounting, technological transformation, organizational performance, contemporary challenges, and future directions. Related findings were compared and synthesized, while differing perspectives were retained to provide a balanced interpretation of the literature.

Several gaps emerge from the reviewed evidence. First, much of the recent Nigerian literature is concentrated on SMEs, manufacturing companies, and banking institutions, with relatively limited evidence integrating management accounting practices across different organizational sizes and sectors. Second, digital accounting, big data, artificial intelligence, and other technologies are increasingly studied, but they are often examined separately from traditional management accounting practices such as budgeting, costing, and performance measurement. Third, many studies rely on cross-sectional survey data, creating limitations for establishing temporal relationships and causal effects. Fourth, the literature provides relatively limited integrated evidence on how managerial capabilities, organizational conditions, technology adoption, and management accounting practices interact to influence performance. Finally, although recent studies have increased attention to digital transformation, artificial intelligence, and analytics, empirical evidence from emerging economies remains less developed than the growing theoretical and review literature on these technologies.

The present review addresses these gaps by synthesizing management accounting research across its historical development, theoretical foundations, strategic applications, organizational performance implications, technological transformation, sustainability concerns, and emerging future directions. Rather than treating individual management accounting practices or technologies as isolated phenomena, the review brings together evidence from different methodological traditions and geographical contexts to identify areas of convergence, methodological limitations, unresolved contradictions, and opportunities for future research.

Conclusion

This review examined the evolution, theoretical foundations, contemporary applications, and technological transformation of management accounting. The literature shows a shift from traditional costing, budgeting, and financial control toward strategic decision-making, digital analytics, sustainability, and organizational value creation. Evidence indicates that management accounting practices and technologies can support decision-making and performance, although outcomes vary across organizational, technological, and institutional contexts. Recent research increasingly emphasizes artificial intelligence, big data, automation, and sustainability, while longitudinal and integrated studies remain limited. Future management accounting development therefore requires greater

integration of digital technologies, strategic capabilities, sustainability considerations, and professional competencies, particularly within developing economies such as Nigeria.

Recommendation

Based on the reviewed evidence, organizations should integrate management accounting with digital technologies such as artificial intelligence, big data analytics, cloud computing, automation, and business intelligence, supported by effective data governance and cybersecurity. Management accountants and professional bodies should strengthen continuous professional development in data analytics, digital technologies, strategic decision-making, communication, and sustainability. SMEs should adopt affordable and scalable management accounting systems suited to their resources and operational needs. Organizations should also incorporate sustainability and ESG information into planning, budgeting, performance measurement, and strategic decisions. Finally, researchers should employ longitudinal, panel, mixed-method, comparative, and sector-specific approaches to generate stronger evidence on management accounting practices and organizational outcomes.

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