

Digital Accounting, MSME Financing, and Economic Growth A PRISMA-Based Systematic Literature Review, Bibliometric Analysis, and VOSviewer Mapping

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Abstract

Digital accounting transformation has reshaped how micro, small, and medium enterprises (MSMEs) record, process, and communicate financial information, while opening new pathways to access financing and contributing to economic growth. This study maps the intellectual structure and thematic evolution of the literature linking digital accounting, MSME financing, and economic growth through a Systematic Literature Review (SLR) based on the PRISMA 2020 protocol, combined with bibliometric analysis and VOSviewer network mapping. The final corpus comprised 54 Scopus-indexed documents published between 2005 and 2026, including journal articles, conference papers, and book chapters. Performance analysis revealed a marked acceleration in scientific output since 2023, with Indonesia, Jordan, Malaysia, and Saudi Arabia emerging as the leading contributors, and a total of 859 citations concentrated in a small number of influential works. Keyword co-occurrence mapping identified six thematic clusters centred on accounting information systems, MSME financial performance, cloud-accounting adoption, decision-making, post-pandemic digital transformation, and system alignment and information quality. The temporal overlay revealed a shift in emphasis from conventional system-alignment issues towards digital accounting, artificial intelligence, and sustainability. The findings confirm that digital accounting serves as an enabler, improving financial information quality, reducing information asymmetry with finance providers, and strengthening MSMEs' capacity for growth. This study contributes to a future research agenda that connects digital financial literacy, financial inclusion, and the macroeconomic effects of MSMEs in developing countries.

Keywords: digital accounting; MSME financing; economic growth; systematic literature review; bibliometrics; VOSviewer; PRISMA

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1. Introduction

Micro, small, and medium enterprises (MSMEs) are the backbone of economic structures in many developing countries because they absorb a large share of employment, promote income distribution, and serve as grassroots innovation engines that drive productivity. However,

despite this strategic role, MSMEs often face limited managerial capacity and weak financial governance, which constrain sustainable growth. Several studies identify the quality of accounting information systems as a critical determinant of effective decision-making and small-business performance in resource-constrained environments [1], [2], [3]. The fundamental issue is therefore no longer merely whether MSMEs use accounting systems, but rather the extent to which they can derive benefits and effectiveness from their use. Understanding the role of digital accounting for MSMEs is thus an urgent academic and policy priority. The digital technology revolution has fundamentally transformed MSME bookkeeping and financial-reporting practices through computerized accounting, cloud services, and data analytics. The shift from manual records to digital systems not only improves operational efficiency but also enhances the transparency and comparability of financial information. The literature shows that the digitalization of accounting processes positions accounting information systems as a driver of business growth and strengthens the sustainability of small enterprises [4], [5], [6]. Cloud-accounting technology, in particular, enables business owners to access real-time financial reports at lower investment costs than conventional systems. Consequently, digital accounting represents the intersection between technological capability and the need for stronger MSME financial governance.

One of the most persistent barriers faced by MSMEs is limited access to formal finance, largely due to the unavailability of adequate and credible financial statements. Financial institutions face substantial information asymmetry when assessing the creditworthiness of small businesses with unstructured financial records. Several studies emphasize that weak financial literacy and poor record-keeping practices leave many MSMEs without usable financial statements, thereby constraining their access to funding [7], [8], [9]. In this context, digital accounting can bridge the information gap between business owners and finance providers by producing more structured, verifiable financial information. In other words, the quality of digital-accounting outputs can serve as a credibility signal that lowers financing costs and risks. The relationship between high-quality financial information, access to finance, and business performance ultimately translates into MSMEs' contribution to aggregate economic growth. When MSMEs can access financing, expand, and increase productivity, the cumulative effects are reflected in job creation and higher national output. Empirical studies show that the adoption of accounting information technology has positive effects on the financial and non-financial performance of small firms across different national settings [10], [11], [12]. The sequential relationship from accounting digitalization to performance and then to growth implies a transmission pathway that warrants systematic investigation. However, the literature linking these three domains in an integrated manner remains scattered and has not yet been comprehensively mapped. Although academic interest in this topic is growing rapidly, the existing body of knowledge remains fragmented across separate disciplinary silos. Research on

accounting information systems tends to focus on the determinants of technology adoption. In contrast, MSME financing research largely emphasizes the demand side of credit, and economic growth research operates at the macro level. Recent studies have begun to link digital accounting to MSME performance, yet comprehensive conceptual integration remains uncommon [13], [14], [15]. As a result, there is a knowledge gap regarding how these three domains interact within a single analytical framework. A comprehensive mapping of the research landscape is therefore a prerequisite for identifying points of convergence and underexplored gaps. To address this fragmentation, a systematic literature review (SLR) combined with a bibliometric analysis provides a transparent and replicable methodological framework. A PRISMA-based SLR ensures that study selection is undertaken in a structured, accountable, and selection-bias-minimizing manner, whereas bibliometrics enables quantitative mapping of the literature's intellectual structure. VOSviewer has proven effective for visualizing keyword co-occurrence networks and identifying dominant thematic clusters [16], [17], [18]. The combination of these three techniques enables researchers to interpret the broader map of research development while detecting its evolutionary direction. This approach is therefore appropriate for addressing the cross-domain integration that lies at the core of this study.

Against this background, this study formulates four principal research questions. First, what are the characteristics and trends of scientific output in the literature linking digital accounting, MSME financing, and economic growth? Second, what intellectual structure and thematic clusters emerge from the keyword co-occurrence network? Third, how does digital accounting enable access to financing and improve MSME performance? Fourth, how are these domains related to economic growth, and what research agenda should be developed in the future? These four questions guide each stage of the study's analysis. This study makes several contributions that distinguish it from previous reviews. Theoretically, it integrates three domains that have largely been studied separately into a coherent bibliometric framework, thereby enriching the understanding of transmission pathways from accounting digitalization to growth. Methodologically, the combination of PRISMA, bibliometric performance analysis, and VOSviewer mapping provides a transparent and replicable foundation for subsequent research [19], [20], [3]. In practice, the findings can guide policymakers, financial institutions, and MSME support organizations in designing interventions that link digital accounting literacy with financial inclusion. The study's added value therefore lies in both its conceptual integration and its policy relevance. The remainder of this article is organized as follows. Section 2 presents the literature review and develops the conceptual foundation for the relationship among digital accounting, MSME financing, and economic growth. Section 3 describes the research method, including the PRISMA protocol, search strategy, inclusion and exclusion criteria, and bibliometric analysis and VOSviewer mapping procedures. Section 4 presents the results and discussion in four main subsections, while Section 5 concludes the article by outlining the conclusions,

implications, limitations, and directions for future research. This structure is designed to enable readers to follow the argument systematically from context to implications.

2. Literature Review and Problem Statement

The concept of digital accounting is rooted in the evolution of accounting information systems (AIS), which integrate information technology into the identification, recording, processing, and reporting of financial transactions. Modern AIS are no longer understood merely as bookkeeping tools; rather, they serve as strategic infrastructure that supports decision-making and management control. Widely adopted information-system success frameworks, such as the DeLone and McLean model, position system quality, information quality, and user satisfaction as predictors of effective use [2], [21], [22]. In the context of small businesses, the quality of digital-accounting outputs directly affects owners' ability to interpret their financial condition. Digital accounting is therefore positioned as a conceptual foundation connecting technology and financial governance. Alignment theory provides an important basis for understanding why some MSMEs derive greater benefits from their accounting systems than others. Alignment between accounting-information requirements and the capabilities of the adopted system determines the extent to which technology creates value for firm performance. Several classical and contemporary studies find that AIS alignment is positively associated with small-firm performance across different settings [1], [23], [10]. When the adopted accounting system matches the business's complexity and needs, the benefits are optimized. Conversely, misalignment prevents technology investment from delivering the expected performance improvements. The adoption of cloud-based accounting technology has become a major stream in the recent literature because it offers a solution to MSMEs' resource constraints. Cloud accounting provides flexible, collaborative, and cost-efficient access to financial reports without requiring extensive technological infrastructure. Theoretical frameworks such as the Technology-Organization-Environment (TOE) framework and the Technology Acceptance Model (TAM) are widely used to explain the determinants of its adoption [24], [25], [9]. Environmental factors, organizational support, and perceived ease of use have been found to influence MSMEs' intention to adopt such systems. Cloud accounting adoption, therefore, serves as an entry point for digital accounting transformation at the small-business level.

The MSME-financing literature emphasizes information asymmetry as a root cause of financing gaps. Financial institutions struggle to assess credit risk when prospective borrowers' financial information is unavailable or unreliable, thereby causing credit rationing. Several studies show that financial-information quality and sound accounting practices improve MSMEs' access to funding and financial management [26], [27], [28]. Financial information produced digitally can serve as a credibility signal, reducing uncertainty for credit assessors. There is thus a clear theoretical connection between digital accounting and expanded access to finance. At

the macro level, MSMEs' contribution to economic growth can be explained through productivity accumulation, job creation, and the diffusion of innovation. Growth theory emphasizes that capital accumulation, including information and technological capital, drives sustained increases in output. Studies in developing-country settings show that technological and economic factors determine the extent of information-technology utilization, which in turn is associated with business performance [29], [30], [31]. When MSMEs grow in the aggregate, their effects spill over into greater productive capacity in the economy. Accounting digitalization, therefore, has macroeconomic relevance that cannot be overlooked. Financial and non-financial performance serve as intervening variables linking digital accounting to growth.

Financial performance includes profitability, liquidity, and efficiency, whereas non-financial performance includes customer satisfaction, organizational learning, and sustainability. Research employing balanced scorecard and non-financial information perspectives finds that AIS contributes to both performance dimensions [32], [33], [34]. The effect of digital accounting is therefore not confined to financial metrics but extends to broader organizational capabilities. The combination of these two dimensions forms the foundation for long-term business growth. The dimensions of governance, standards, and information security have become increasingly prominent as accounting digitalization expands. Standardized financial reporting and data protection are prerequisites for external stakeholders to trust digital accounting information. Several studies highlight the importance of accounting standards, cybersecurity, and external accountants' capabilities in supporting information quality [35], [36], [37]. Without an adequate governance framework, the benefits of digital accounting may be undermined by reliability and security concerns. Governance is therefore an essential complement to this study's conceptual framework. The synthesis of the literature streams above reveals a conceptual pathway linking digital accounting, MSME financing, and economic growth.

Digital accounting improves financial-information quality; better information enhances access to finance and performance; and improved performance contributes to aggregate growth. Although each linkage has received partial empirical support, an integrated examination of the full pathway remains rare [20], [38], [39]. This is the gap addressed through the bibliometric mapping in this study. By mapping the intellectual structure of the literature, the study seeks to bridge research silos that have remained separate.

3. Method

This study adopts a systematic literature review (SLR) combined with bibliometric analysis and network mapping to address the four research questions. The SLR approach was selected because it provides a transparent, systematic, and replicable procedure for identifying, screening, and synthesizing scientific evidence. Bibliometric analysis complements the SLR by offering quantitative capabilities for mapping the literature's intellectual structure, publication

trends, and thematic networks [16], [18], [17]. Combining the two approaches enables the study to capture both interpretive depth and quantitative breadth. This methodological design is therefore appropriate for the cross-domain integration at the heart of the study.

The reporting protocol follows the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 framework, which comprises four phases: identification, screening, eligibility, and inclusion. The PRISMA framework was selected because it has become an international standard for ensuring accountability and traceability in study selection. The use of such structured protocols is well established in systematic reviews of digital accounting and MSME empowerment [17], [18], [16]. Each phase was explicitly documented to enable replication by other researchers. The PRISMA flow diagram in Fig. 1 summarizes the complete study-selection process.

Data were retrieved from the Scopus database, which was selected for its coverage of internationally reputable journals, comprehensive metadata, and export capability compatible with bibliometric tools. The search was conducted on 30 June 2026 using combinations of keywords representing three core domains: digital accounting (digital accounting, accounting information system, cloud accounting), small businesses (SME, MSME, small business), and performance and financing (financial performance, finance). The selection of Scopus as a single source is consistent with prior bibliometric reviews that emphasize metadata quality and consistency [3], [19], [20]. The search strings were applied to titles, abstracts, and keywords to ensure thematic relevance. The results were then exported in Research Information Systems (RIS) format for further processing.

The identification stage yielded 55 initial records from Scopus, with no additional records from other sources. During screening, duplicate detection using Digital Object Identifiers (DOIs) and title similarity removed 1 duplicate record, leaving 54 unique records. Title and abstract screening was conducted to ensure that each document was relevant to the intersection of digital accounting and MSMEs, as is common in comparable systematic reviews [40], [9], [8]. All 54 records were deemed relevant, and none were excluded at this stage. The high retention rate reflects the precision of the deliberately specific search string.

The inclusion criteria were explicitly established to maintain corpus relevance and quality: Scopus-indexed documents written in English that address the intersection of digital accounting or accounting information systems and MSMEs and contain complete metadata. Exclusion criteria comprised out-of-scope documents, duplicates, and records with insufficient metadata. Setting such clear criteria is standard practice for minimizing selection bias in systematic reviews [12], [41], [3]. At the eligibility stage, all 54 documents met the criteria and were therefore included in the synthesis. The final corpus comprised several document types, including journal articles, conference papers, book chapters, and conference reviews.

The analysis was conducted in two layers: performance analysis and science mapping. Performance analysis measured productivity and impact through annual publication distributions, document types, publication sources, country contributions, and the most-cited documents. This two-layer approach is consistent with contemporary bibliometric frameworks that distinguish the productivity dimension from the intellectual-structure dimension [5], [2], [4]. Performance indicators were calculated from RIS metadata using Python programming to ensure accuracy and reproducibility. The results are presented through figures and concise tables to facilitate interpretation.

Science mapping was conducted through keyword co-occurrence analysis following the principles implemented in VOSviewer, including network construction, association-strength normalization, clustering, and visualization. Keywords were first normalized to consolidate synonyms and spelling variations, and then filtered by a minimum-occurrence threshold to maintain map readability. Such network-mapping techniques have proven effective in revealing thematic structures and research evolution trajectories [17], [16], [18]. Clustering was performed using a modularity-based community-detection algorithm; node size represents frequency, whereas colour represents cluster membership. A temporal overlay was added to capture shifts in thematic emphasis over time.

To ensure validity and reliability, this study applied several bias-mitigation measures. The selection process was documented in accordance with PRISMA, keyword normalization was undertaken consistently, and all bibliometric computations were replicated through auditable scripts. The limitation of using a single database is transparently acknowledged, as is common in comparable reviews that emphasize the trade-off between metadata consistency and coverage [39], [42], [34]. Triangulation between performance analysis and science mapping strengthens the validity of the interpretation. Through these procedures, the findings are expected to be credible, transparent, and replicable by other researchers.

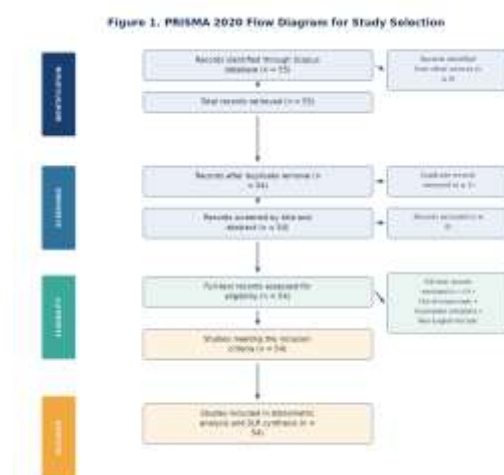


Fig. 1. PRISMA 2020 Flow Diagram of the Study-Selection Process.

Table 1. Research Questions and Analytical Approaches

RQ	Research Question	Analytical Approach
RQ1	What are the characteristics and trends of scientific output in the literature?	Bibliometric performance analysis
RQ2	What intellectual structure and thematic clusters emerge from the literature?	Keyword co-occurrence mapping (VOSviewer)
RQ3	What role does digital accounting play in enabling financing?	Qualitative SLR synthesis
RQ4	How is the topic linked to economic growth and the future research agenda?	Integrative synthesis

4. Results and Discussion

Characteristics and Trends in Scientific Output

Performance analysis of the 54 documents reveals a pattern of scientific output typical of a rapidly developing field. As shown in Fig. 2, the publication period spans 2005 to 2026, with sporadic early contributions during 2005–2011, followed by a sharp increase in the second half of the 2020s. This increase aligns with the acceleration of digital technology adoption among MSMEs reported in the contemporary literature [20], [13], [15]. Such an exponential-growth pattern indicates that the intersection of digital accounting and MSMEs is a research field undergoing maturation. Academic momentum on this topic is therefore in a promising phase of expansion.

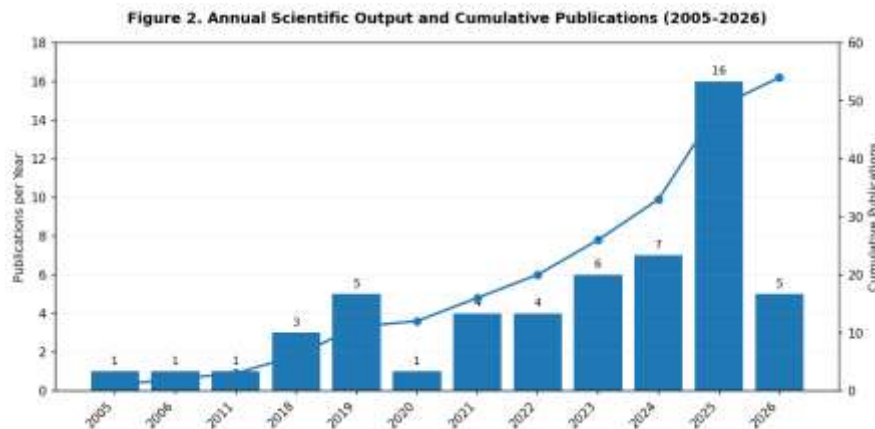


Fig. 2. Annual Scientific Output and Cumulative Publications (2005–2026).

Scientific output peaked in 2025, which recorded the highest number of publications in the corpus, followed by strong contributions in 2024 and 2026. The concentration of publications in the three most recent years indicates that most knowledge in this field is highly contemporary. This pattern is consistent with evidence that MSME digital transformation has become a post-pandemic research priority in many developing countries [5], [30], [43]. The predominance of recent literature suggests that conceptual frameworks and empirical findings are still evolving. Consequently, researchers have substantial scope to contribute to consolidating theory in this area.

The document-type distribution in Fig. 3 indicates that journal articles are the predominant publication type, followed by conference proceedings and book chapters. This composition suggests that the field has reached a certain degree of maturity, reflected in its acceptance by reputable journals. A similar pattern is found in other bibliometric studies of accounting information systems and technology adoption [3], [2], [12]. The sizeable presence of conference proceedings also indicates active early-stage dissemination of ideas. Together, these outlets reflect a dynamic and multilayered academic ecosystem.

Figure 3. Document-Type Composition and Publication Sources

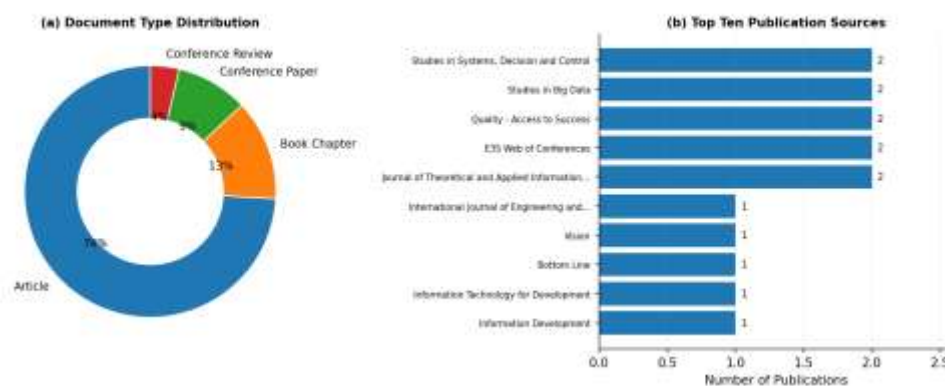


Fig. 3. Document-Type Distribution and Top Ten Publication Sources.

At the source level, the corpus is dispersed across diverse journals and book series, reflecting the field's multidisciplinary character. Several sources appear more than once, including the Studies in Systems, Decision and Control series and several information technology and quality journals. This diversity of publication outlets confirms that digital accounting in MSMEs attracts interest across multiple scholarly communities, including accounting, information systems, and management [4], [11], [29]. The absence of concentration in a single journal indicates that the field has not yet been institutionalized within a specific outlet. It also creates opportunities to develop a more coordinated research community.

The mapping of country contributions in Fig. 4 reveals an interesting geographical pattern, with Indonesia leading in document contributions. Indonesia is followed by Jordan, Malaysia, and Saudi Arabia, all of which actively investigate the adoption of accounting information systems among MSMEs. The predominance of developing countries in the corpus reflects the practical urgency of MSME digital transformation in these regions [6], [24], [32]. The concentration of research in developing-country settings is consistent with the prominent role that MSMEs play in their economies. The geographical landscape of this literature is therefore highly relevant to development challenges in the Global South.

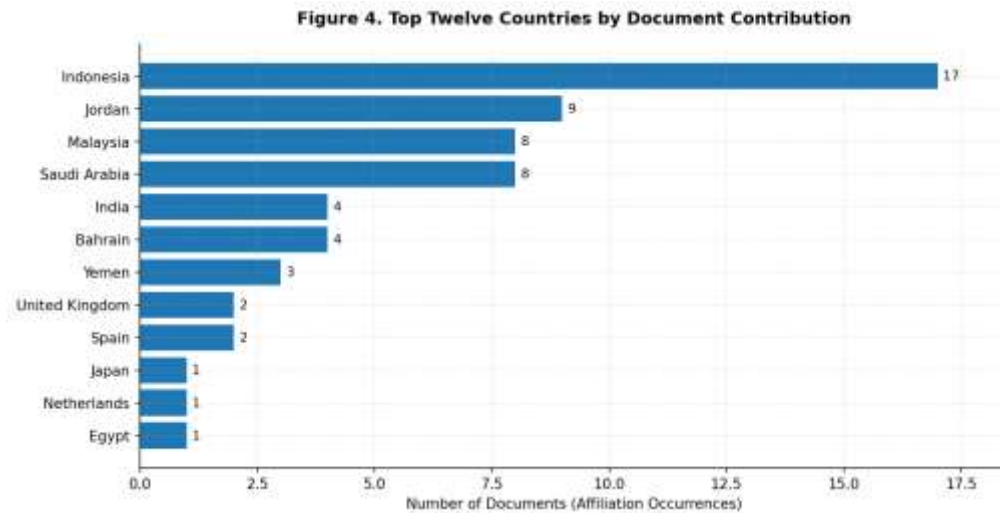


Fig. 4. Top Twelve Countries by Document Contribution.

Citation analysis shows that the total of 859 citations is unevenly distributed, with a small number of works accounting for a large share of academic impact. The average of approximately 15.9 citations per document indicates a healthy level of influence for a relatively young field. As shown in Fig. 5, the most-cited works focus on MSME sustainability, cloud-accounting adoption, and system alignment [5], [24], [1]. The concentration of citations around these themes signals an intellectual core that serves as the field's primary reference base. These influential works provide the foundation for subsequent research and development.

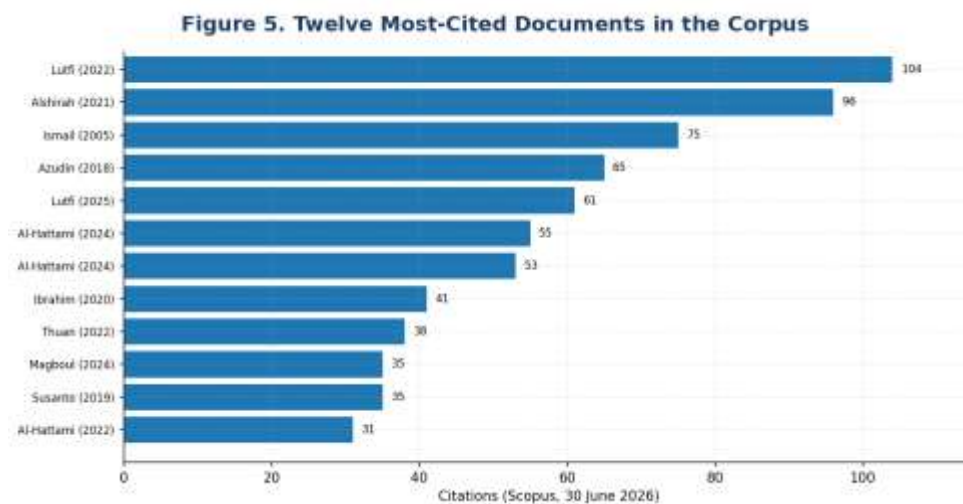


Fig. 5. Twelve Most-Cited Documents in the Corpus.

Table 2. Ten Most-Cited Documents

No.	Author (Year)	Title (abridged)	Citations
1	Lutfi (2022)	Business Sustainability of Small and Medium Enterprises duri...	104
2	Alshirah (2021)	Influences of the environmental factors on the intention to ...	96
3	Ismail (2005)	Firm performance and AIS alignment in Malaysian SMEs	75

No.	Author (Year)	Title (abridged)	Citations
4	Azudin (2018)	Management accounting practices of SMEs: The impact of organ...	65
5	Lutfi (2025)	The Impact of AIS Usage on AIS Effectiveness Among Jordanian...	61
6	Al-Hattami (2024)	Impact of AIS success on decision-making effectiveness among...	55
7	Al-Hattami (2024)	The influence of accounting information system on management...	53
8	Ibrahim (2020)	Accounting information systems (AIS) in SMEs: Towards an int...	41
9	Thuan (2022)	The Determinants of the Usage of Accounting Information Syst...	38
10	Magboul (2024)	Factors influencing accounting information system usage by o...	35

The skewed citation distribution follows the Lotka and Bradford regularities commonly observed in bibliometric studies, in which a small number of works and authors dominate productivity and impact. Authors such as Al Astal, Lutfi, and Al-Hattami appear repeatedly as productive contributors to the corpus. The presence of these core authors indicates research groups that consistently address MSME accounting-information systems [19], [20], [40]. Their sustained contributions strengthen the field's intellectual cohesion. At the same time, the large number of one-time contributors indicates broad and open participation.

Taken together, the performance analysis portrays a young, dynamic research field driven by practical urgency in developing countries. Accelerating publication output, the predominance of journal articles, a geographical focus on the Global South, and concentrated citations around core works characterize a field moving towards maturity. This profile indicates that cross-domain conceptual integration is becoming increasingly necessary [39], [34], [44]. The documented trends provide an empirical basis for interpreting the thematic structure discussed in the next subsection. Performance analysis thus serves as a foundation for mapping the literature's intellectual structure.

Bibliometric Mapping and Thematic Clusters (VOSviewer)

Keyword co-occurrence network mapping revealed an intellectual structure comprising 34 nodes and 131 edges distributed across six thematic clusters, as shown in Fig. 6. Node size, which represents frequency, indicates that the keywords "accounting information systems" and "MSMEs" form the gravitational core of the entire network. The centrality of these two concepts confirms that their intersection constitutes the main axis of the literature [2], [1], [10]. The density of edges around this core indicates strong interconnections among concepts in the field. The centralized yet branching network structure reflects a field that is both coherent and diverse.

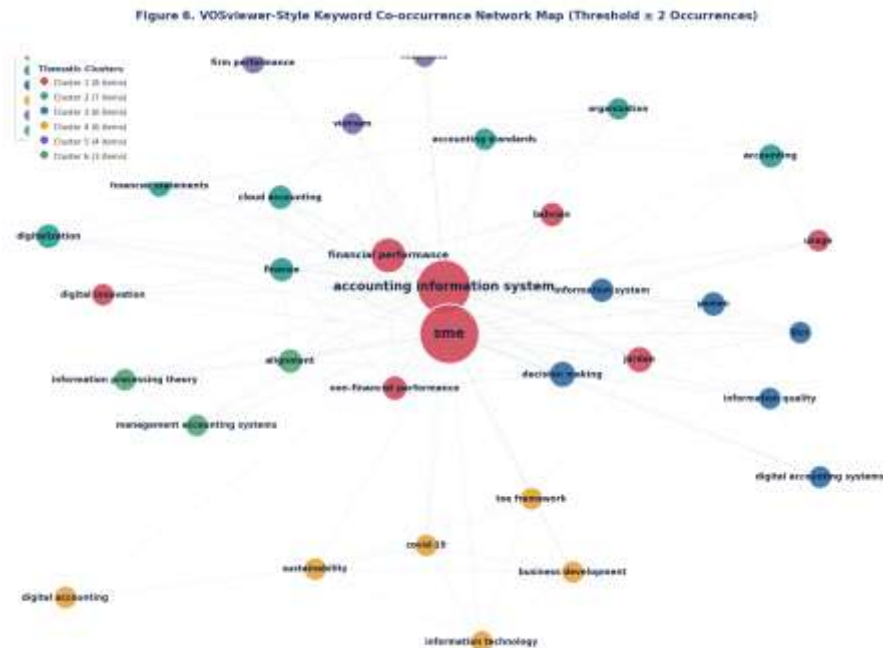


Fig. 6. VOSviewer-Style Keyword Co-occurrence Network Map (Threshold ≥ 2 Occurrences).

The first cluster (red) centres on MSMEs, accounting information systems, financial performance, and non-financial performance, thereby forming the thematic core of the field. This cluster represents the mainstream research stream linking accounting-technology adoption to small-business performance outcomes. The close relationships among concepts within this cluster are supported by numerous empirical studies across national contexts [33], [39], [38]. The dominance of this cluster indicates that questions concerning performance effects remain central. The red cluster can therefore be regarded as the intellectual heart of the literature.

The second cluster (green) brings together the concepts of accounting, digitalization, cloud accounting, finance, and financial reporting, reflecting the digital transformation dimension. This cluster highlights the shift from conventional accounting towards a cloud-based accounting ecosystem. The relationships among these concepts underscore digitalization's role as a bridge to improved financial reporting [8], [25], [9]. The presence of finance and financial-reporting concepts in this cluster indicates a direct connection to financing needs. The green cluster therefore serves as a conceptual bridge to the MSME financing domain.

The third cluster (blue) revolves around decision-making, information systems, information quality, and the context of least developed countries (LDCs). This cluster positions information quality as a determinant of effective managerial decision-making. Several studies confirm that information and system quality affect user satisfaction and decision effectiveness [2], [21], [22]. The emphasis on the LDC context signals concern for development relevance. The blue cluster, therefore, strengthens the cognitive and contextual dimensions of digital accounting utilization.

The fourth cluster (yellow) links the COVID-19 pandemic, business development, the TOE framework, digital accounting, information technology, and sustainability. This cluster captures the momentum of digital transformation triggered by the pandemic shock and the need for sustainability. The literature shows that the pandemic crisis accelerated technology adoption as a strategy for MSME survival and development [5], [30], [18]. The presence of the TOE framework confirms attention to adoption determinants at organizational and environmental levels. The yellow cluster, therefore, represents the most contemporary contextual-temporal dimension in the field.

The fifth (purple) and sixth (light green) clusters, respectively, highlight accounting information quality in specific contexts, notably Indonesia and Vietnam, and system alignment and information-processing theory. These clusters complement the map with more specific contextual and theoretical dimensions. Studies in these contexts confirm that alignment and information quality determine small-firm performance [23], [11], [45]. Although smaller in size, these clusters signal directions of research specialization. Their presence enriches the intellectual structure with local and theoretical nuance.

The temporal overlay visualization in Fig. 7 reveals the evolution of thematic emphasis over time through colour gradients based on the average year of occurrence. Classical concepts, such as system alignment and information-processing theory, tend to appear in older colours, whereas digital accounting, artificial intelligence, and sustainability appear more recent. This shift indicates a transition in research from technical adoption issues to strategic and sustainability implications [42], [36], [13]. The temporal pattern is consistent with the publication acceleration observed in the performance analysis. The temporal overlay thus adds a dynamic dimension to the interpretation of the thematic structure.

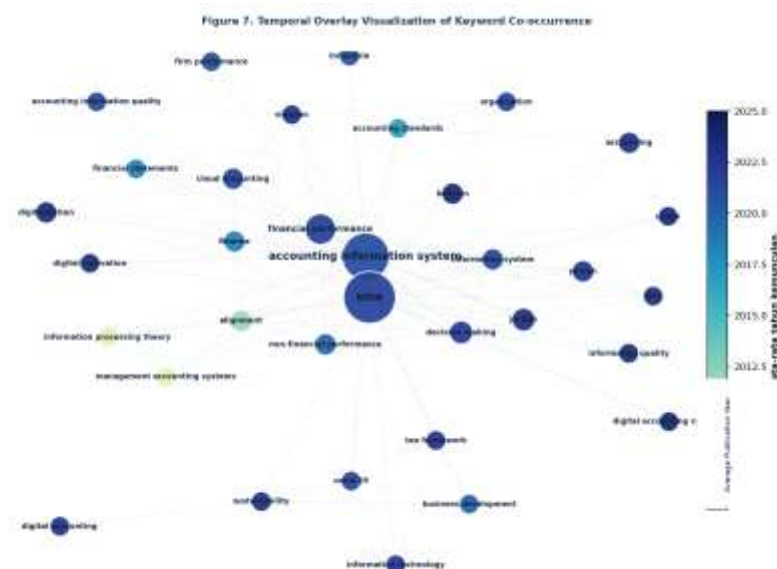


Fig. 7. Temporal Overlay Visualization of Keyword Co-occurrence.

Table 3. Summary of Six Thematic Clusters from the Co-occurrence Mapping

Thematic Cluster	Number of Items	Key Terms
Cluster 1 (Red) — MSME Performance Core	8	sme, accounting information system, financial performance, Jordan, Bahrain, non-financial performance
Cluster 2 (Green) — Digital Transformation & Cloud	7	accounting, digitalization, cloud accounting, finance, accounting standards, organization
Cluster 3 (Blue) — Decision-Making & Information Quality	6	decision making, information system, Yemen, digital accounting systems, information quality, LDCs
Cluster 4 (Yellow) — Post-Pandemic Adoption & Sustainability	6	COVID-19, business development, TOE framework, digital accounting, information technology, sustainability
Cluster 5 (Purple) — Context & Firm Performance	4	accounting information quality, indonesia, Vietnam, firm performance
Cluster 6 (Light Green) — Alignment & Theory	3	alignment, management accounting systems, information processing theory

A synthesis of the six clusters reveals a coherent conceptual pathway from accounting digitalization, through information quality and performance, to sustainability and growth. The digital-transformation cluster is connected to the performance cluster, which in turn is linked to the decision-making and sustainability clusters. These intercluster connections confirm that the research field forms a coherent transmission pathway [20], [19], [39]. This mapping answers the second research question concerning the literature's intellectual structure. It also provides a foundation for discussing the role of digital accounting as a financing enabler in the next subsection.

Digital Accounting as an Enabler of MSME Financing

One of the most consistent findings in the corpus is the role of digital accounting in improving the quality of financial information, which is a prerequisite for access to finance. Digital accounting systems generate records that are more accurate, structured, and timely than error-prone manual records. Several studies confirm that system quality and information quality are primary determinants of effective use of accounting among MSMEs [2], [21], [3]. This high-quality financial information becomes an important asset when MSMEs engage with financial institutions. Digital accounting, therefore, serves as a foundation for small-business financial credibility.

Digital accounting reduces information asymmetry between MSMEs and finance providers by generating verifiable financial statements. When financial information is available transparently, credit assessors can evaluate risk more accurately, thereby reducing credit rationing. The literature shows that sound accounting practices and financial literacy improve financial management and MSMEs' access to funding [7], [28], [26]. This reduction in information asymmetry is a key mechanism linking digitalization with financial inclusion. Digital accounting can therefore be understood as a credibility signal that lowers financing costs.

Cloud-accounting adoption, in particular, extends the reach of digital accounting to resource-constrained MSMEs. Subscription-based models enable business owners to access sophisticated accounting functions without large infrastructure investments. Research finds that environmental factors, ease of use, and organizational support influence the intention to adopt cloud accounting [24], [25], [9]. This accessibility increases the likelihood that MSMEs can produce creditworthy financial statements. Cloud accounting, therefore, becomes a catalyst for democratizing access to digital financial governance.

Digital financial literacy emerges as a critical moderating factor in determining whether investment in accounting technology yields tangible benefits. Without adequate understanding, MSMEs are unlikely to use digital-accounting outputs optimally. Studies show that training and knowledge development improve financial literacy and encourage more systematic financial behaviour [7], [8], [6]. Greater literacy strengthens MSMEs' capacity to prepare and interpret financial statements. Literacy interventions are therefore an inseparable complement to technology adoption.

Digital accounting also strengthens internal decision-making functions that affect MSMEs' financial viability. Timely information enables business owners to manage cash flow, plan investments, and evaluate performance continuously. Empirical evidence indicates that accounting information system success improves decision-making effectiveness and planning processes [2], [46], [47]. Better decisions, in turn, improve the financial profile assessed by finance providers. The internal benefits of digital accounting are therefore closely linked to eligibility for external financing.

Information security and governance become increasingly important when digital financial information is used for financing decisions. Data reliability and security determine the extent to which external stakeholders trust information presented by MSMEs. Several studies highlight the role of cybersecurity, reporting standards, and external accountants' advice in safeguarding information integrity [36], [35], [37]. Without an adequate governance framework, the credibility of digital information may be compromised. Information governance is therefore a prerequisite for digital accounting to function as a genuine enabler of financing.

Technological advances such as artificial intelligence and blockchain are beginning to expand the capabilities of digital accounting in supporting MSME financing. Automated transaction processing and enhanced audit trails strengthen the reliability of information used for credit assessment. Recent research shows that artificial intelligence and blockchain improve the efficiency and empowerment potential of MSME digital accounting [42], [17], [4]. These technologies may enable more inclusive, data-driven credit-assessment models. Frontier technologies thus open new pathways to information-based financing inclusion.

Overall, evidence in the corpus supports the proposition that digital accounting acts as a multidimensional enabler of MSME financing. Its roles include improving information quality, reducing information asymmetry, expanding access through cloud technology, strengthening literacy, improving decision-making, and ensuring reliability through governance. Collectively, these mechanisms strengthen MSMEs' capacity to obtain and use financing [20], [39], [13]. These consistent linkages answer the third research question concerning the enabling role of digital accounting. The findings provide a basis for examining its implications for economic growth in the final subsection.

Linkages with Economic Growth and the Future Research Agenda

The linkages among digital accounting, MSME financing, and economic growth can be understood as a layered transmission pathway operating from the micro to aggregate levels. Digital accounting improves information quality; improved information quality expands access to finance; expanded access to finance enables expansion; and MSME expansion contributes to national output. Empirical literature supports the early links in this pathway, showing positive effects of accounting information systems on both financial and non-financial performance [10], [11], [12]. The accumulation of performance improvements at the small-business level forms the basis for growth. This transmission pathway therefore connects micro-level decisions with macroeconomic outcomes.

At the aggregate level, improved MSME performance and expansion contribute to job creation and greater economic productivity. Growth theory emphasizes that capital accumulation, including technological and information capital, drives sustained increases in output. Studies in developing-country settings show that information-technology utilization is associated with economic factors that shape business performance [29], [30], [31]. When thousands of MSMEs simultaneously improve productivity through digitalization, the aggregate effects become significant. Accounting digitalization, therefore, has tangible macroeconomic relevance.

Business sustainability represents an important mechanism linking digital accounting to long-term growth. MSMEs that can survive and develop make a more stable contribution to the economy than fragile enterprises. Research finds that the adoption of accounting technology strengthens MSME business sustainability, especially during periods of crisis [5], [30], [18]. This sustainability ensures that MSMEs' contribution to growth is continuous. Digital accounting therefore promotes not only short-term growth but also long-term resilience.

Although this transmission pathway is conceptually coherent, the corpus indicates that direct empirical evidence linking digital accounting to macroeconomic growth remains limited. Most studies stop at the firm-performance level and do not yet reach aggregate effects. This gap indicates the need for research that explicitly tests the linkage between MSME digitalization and growth indicators [13], [14], [15]. The absence of direct macro-level evidence is an important gap in the literature. Future research agendas, therefore, need to bridge micro and macro levels methodologically. The first recommended research agenda is to develop studies that integrate digital financial literacy, financial inclusion, and growth effects within a single empirical model. This approach would test the entire transmission pathway rather than isolated segments. Such studies can draw on frameworks developed in the technology adoption and MSME performance literature [20], [19], [39]. This conceptual integration would strengthen understanding of the causal chain. Subsequent research could thereby offer more complete evidence for the propositions advanced in this study.

The second research agenda concerns geographical context, given the predominance of developing countries in the corpus and the limited number of cross-country comparative studies. Comparative research can reveal how differences in institutions, regulations, and infrastructure affect the effectiveness of digital accounting. Studies in contexts such as Indonesia, Jordan, and Malaysia demonstrate important variation in determinants of adoption [6], [24], [1]. Understanding this contextual variation is crucial for formulating well-targeted policy. Cross-jurisdictional comparative research should therefore be a high-value priority.

The third research agenda concerns frontier technologies such as artificial intelligence, blockchain, and data analytics, which have the potential to transform MSME credit assessment. These technologies create opportunities for more inclusive alternative data-driven financing models for businesses without conventional collateral. Early research indicates that artificial intelligence and blockchain enhance the efficiency and reliability of digital accounting [42], [17], [36]. Exploration of their implications for financial inclusion remains wide open. The intersection of financial technology and digital accounting is therefore a promising research frontier.

Overall, this subsection confirms that digital accounting is relevant across levels, from micro-level governance to macroeconomic growth, although some linkages still require further evidence. The transmission pathway from digitalization to information quality, financing, performance, sustainability, and growth forms an integrative framework that answers the fourth research question. This framework also maps the gaps and research directions to pursue in the future [34], [44], [43]. By linking partial empirical findings into one coherent pathway, this study makes an integrative contribution. These findings provide the basis for the conclusions and implications presented in the closing section.

5. Conclusion

This study maps the intellectual structure and thematic evolution of literature linking digital accounting, MSME financing, and economic growth through a PRISMA-based SLR combined with bibliometric analysis and VOSviewer mapping of 54 Scopus documents. Performance analysis reveals a young but rapidly developing research field, marked by accelerated publication output since 2023, the predominance of journal articles, and concentrated contributions from developing countries such as Indonesia, Jordan, and Malaysia. Co-occurrence mapping identifies six thematic clusters centred on accounting information systems, MSME performance, cloud accounting, decision-making, post-pandemic digital transformation, and alignment and information quality. The synthesis of findings confirms that digital accounting functions as a multidimensional enabler, improving financial information quality, reducing information asymmetry with financial providers, expanding access through cloud technology, and strengthening MSME decision-making. These mechanisms form a transmission pathway linking micro-level accounting digitalization to aggregate-level contributions to economic growth, although empirical evidence for the macro-level linkage remains limited. The study therefore bridges research silos that have long remained separate within one coherent integrative framework. The practical implications of these findings are relevant to policymakers, financial institutions, and MSME support organizations. Policies that combine digital accounting literacy programmes with financial inclusion schemes may strengthen MSMEs' capacity to grow sustainably. Financial institutions can use digital accounting information to inform more inclusive credit assessment, while MSME support organizations can prioritize strengthening digital capabilities and financial literacy simultaneously. This study has several limitations that also create opportunities for further research. The use of Scopus as a single database, although it ensures metadata consistency, may limit the literature coverage; integrating with other databases, such as Web of Science, could expand the corpus. In addition, bibliometric analysis is descriptive and does not test causal relationships. Future research is encouraged to develop empirical models that explicitly link digital financial literacy, financial inclusion, and growth effects, and to explore the role of artificial intelligence and blockchain in expanding MSME financing inclusion in developing countries.

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