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NEXT-GENERATION ACCOUNTING TECHNOLOGIES IN SMES: EXPLORING DIGITAL ACCOUNTING SHIFTS, RESEARCH THEMES, AND FUTURE OPPORTUNITIES

Farah Husna Mohd Fatzel^{1*}, Wan Razazila Wan Abdullah², Norhayati Zamri³, Noor Asrafez Jailuddin⁴

¹Faculty of Accountancy, Universiti Teknologi MARA, Perak Branch, Tapah Campus, Malaysia

 farahhusna@uitm.edu.my

 <https://orcid.org/0009-0004-2405-0544>

²Faculty of Accountancy, Universiti Teknologi MARA, Perak Branch, Tapah Campus, Malaysia

 wanrazz@uitm.edu.my

 <https://orcid.org/0009-0000-4546-1255>

³Faculty of Accountancy, Universiti Teknologi MARA, Perak Branch, Tapah Campus, Malaysia

 norha266@uitm.edu.my

 <https://orcid.org/0009-0005-4808-8448>

⁴Faculty of Accountancy, Universiti Teknologi MARA, Kedah Branch, Sungai Petani Campus, Malaysia

 noorasrafez@uitm.edu.my

 <https://orcid.org/0009-0000-2940-5114>

*Corresponding Author

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Abstract:

This study reviews the research landscape, emerging trends, and future directions of next-generation accounting technologies in small and medium-sized enterprises (SMEs). However, despite the increasing number of studies on digital accounting and new technologies, there is a lack of bibliometric synthesis that specifically incorporates these developments within the framework of SME accounting. To fill this gap, bibliographic data was extracted from the Scopus database through three conceptual blocks covering SMEs, accounting and technology. The first search yielded 1,106 documents which were narrowed down to 428 English language journal articles published from 2016 to 2026 in the Business, Management and Accounting subject area. The data were downloaded on 2 July 2026, and analysed in VOSviewer by annual publication trend, country-level distribution, co-occurrence of keywords, bibliographic coupling and source citation analysis. The findings show a remarkable increase in scholarly attention, from less than ten documents per year in 2016 to 2018 to an estimated 120 documents per year in 2025. Research is strongly concentrated in developing and emerging economies, led by Indonesia with approximately 80 publications, followed by India and Jordan with about 43 each, and Malaysia with approximately 42. Keyword co-occurrence analysis identified "SMEs" as the most prominent keyword, with 208

occurrences and a total link strength of 217, while the literature broadly clustered around digital transformation and performance, technology adoption, emerging accounting technologies, and accounting information quality and decision-making. Bibliographic coupling further identified three major research fronts involving SME technology adoption and performance, cloud accounting and accounting information systems, and digital technologies for information quality and decision-making. The study contributes an SME-specific and integrated bibliometric perspective that shows how the field has evolved beyond traditional accounting information systems towards a broader research agenda involving cloud-based, intelligent, automated, and data-driven technologies.

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Bibliometric Analysis, Cloud Accounting, Digital Transformation, Next-Generation Accounting Technologies, SMEs



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Introduction

Small and medium-sized enterprises (SMEs) are important contributors to economic growth, employment creation, innovation, and business sustainability. In the current digital economy, accounting practices in SMEs are increasingly influenced by next-generation technologies such as cloud accounting, artificial intelligence, blockchain, robotic process automation, big data analytics, and integrated digital platforms. These technologies have the potential to transform accounting from a traditional record-keeping function into a more strategic function that supports real-time reporting, financial analysis, risk management, regulatory compliance, and decision-making.

The scientific problem that this study addresses is the growing, but fragmented, body of research on the adoption and development of next-generation accounting technologies in SMEs. Although a number of studies have explored digital accounting, automation, cloud-based systems, artificial intelligence and blockchain in accounting, the literature remains scattered across various technologies, research settings, industries, countries and theoretical perspectives. Therefore, it is difficult to identify the leading research topics, the direction of academic development and the gaps to be further studied. This creates a need to systematically map the research landscape to understand how this field has evolved and where future research should be directed.

The importance of this study is substantiated by the growing need of SMEs to improve accounting efficiency, accuracy, transparency, and decision-making by means of digital transformation. Unlike large organisations, SMEs often face limitations in financial resources, technological capabilities, skilled personnel, and awareness of suitable digital accounting solutions. Therefore, understanding current research trends is important not only for academic development, but also for practitioners, policymakers, accounting professionals, and SME owners who seek to support technology adoption in accounting practices.

The problem addressed in this study is the lack of a comprehensive bibliometric understanding of next-generation accounting technologies within the specific context of small and medium-sized enterprises (SMEs). Although previous bibliometric studies have examined topics related to accounting digitalisation, emerging technologies, artificial intelligence, blockchain, cloud accounting, and other aspects of technological transformation in accounting, these studies have largely examined such technologies individually or within broader accounting and business contexts. Consequently, the intersection between next-generation accounting technologies and SMEs remains fragmented and insufficiently synthesised. In particular, limited attention has been given to how research in this specific field has evolved over time, which technologies and accounting functions dominate the literature, how different research themes are interconnected, and which emerging areas remain underexplored. This leaves a considerable research gap, with limited consolidated evidence on the intellectual structure, thematic development, emerging trends and future research opportunities on the adoption and application of next-generation accounting technologies in SMEs. This gap is important to address because SMEs differ from larger organisations in terms of financial resources, technological capabilities, human capital and readiness to adopt advanced accounting technologies.

This study aims to fill this gap by providing a systematic bibliometric mapping of the research landscape of next-generation accounting technologies in SMEs. The specific objectives of this study are: 1) to explore the growth and development of research in this field; 2) to identify the main technologies, accounting-related themes and influential areas of scholarly work; 3) to analyse the relationships and thematic patterns within the existing literature; 4) to identify new areas of scholarly interest; and 5) to highlight underexplored topics and research gaps that can guide future research. This study offers a more integrated understanding of how technological transformation is studied in the SME accounting context by focusing specifically on the intersection of accounting technologies and SMEs and therefore expands beyond technology-specific or general accounting perspectives of existing bibliometric research.

Therefore, it is important to review the current literature on SMEs, digital transformation in accounting and the main technologies that influence current accounting practices. The next section reviews relevant literature in an effort to establish the conceptual framework for this study and to contextualise the analysis that follows.

Literature Review

In this section, we review the relevant literature on next-generation accounting technologies in SMEs. It focuses on three main areas: digital transformation in SME accounting, the evolution and scope of next-generation accounting technologies and the benefits and challenges of technology adoption. These domains constitute the conceptual foundation for the understanding of the research landscape studied in this study.

SMEs and the Digital Transformation of Accounting

It is well known that Small and Medium-sized Enterprises (SMEs) are important drivers of economic growth, job creation, innovation and business sustainability. Although economically important, SMEs often operate with limited financial resources, technology and specialised accounting knowledge. These limitations may impact their ability to keep accurate accounting records, prepare timely financial reports, meet tax and regulatory requirements, and use accounting information for making strategic choices. In this regard, the digital transformation of accounting has become increasingly significant in that SMEs need accounting systems that not only are effective in maintaining records but also have the capability to support financial visibility, operational control, compliance, and business planning.

Digital transformation in accounting refers to the transition from manual or traditional accounting processes to technology-enabled processes that enable automation, real-time reporting, data integration, and better financial decision-making. This change is particularly important for SMEs, because accounting information is generally central to cash flow management, profitability tracking, cost control, tax reporting preparation, and support for financing decisions. Mediaty et al. (2025) pointed out that Accounting Information Systems (AIS) can enhance operational efficiency, transparency and the quality of financial data of SMEs, while Hasan et al. (2025) reported that digital transformation via technologies like artificial intelligence, blockchain and cloud computing can improve real-time financial reporting and decision-making in SME accounting practices.

However, digital accounting transformation should not be understood merely as the adoption of accounting software. It also involves changes in accounting workflows, data management practices, internal controls, employee competencies, and managerial decision-making processes. Sagala and Óri (2024) emphasised that SME digital transformation depends on multiple organisational factors, including readiness, learning capability, leadership, strategic alignment, and financial capacity. This is consistent with studies on cloud accounting adoption, which show that technological readiness, organisational support, user competence, perceived benefits, and environmental factors influence whether SMEs can successfully adopt and use digital accounting systems (Permatasari et al., 2025; Putri et al., 2025; Septiawan et al., 2025). Cloud accounting is one of the most visible forms of accounting digitalisation for SMEs. It allows access to financial data via the internet and does not require significant investment in internal IT infrastructure. This makes it attractive to the SMEs that require affordable, scalable and user-friendly accounting solutions. Technological, organisational, and environmental determinants influence the use of cloud accounting system among Indonesian SMEs (Permatasari et al., 2025). Similarly, Putri et al. (2025) found that the adoption of cloud accounting among MSMEs is driven by the perceived benefits and cost-effectiveness of cloud accounting, particularly in improving the quality of financial reporting. Septiawan et al. (2025) also revealed that the adoption of cloud accounting in SMEs is influenced by supporting and inhibiting factors such as compatibility, scalability, vendor support, management commitment, cybersecurity concerns, IT skills, and change resistance.

The benefits of digital accounting transformation for SMEs are therefore closely linked to efficiency, reporting quality, transparency, and decision-making. Digital accounting systems can reduce manual errors, improve the timeliness of financial information, support collaboration between business owners and accountants, and provide better visibility over business performance. Phu et al. (2025) showed that cloud computing technologies can

influence cloud accounting adoption and financial management outcomes, particularly through factors such as security, privacy, system integration, and cost-benefit considerations. These findings suggest that the value of digital accounting is not limited to automation but also extends to improving the quality and usefulness of accounting information for business management.

However, there are still major obstacles to the adoption of digital accounting technologies by SMEs. Among these are implementation costs, subscription fees, lack of digital skills, low financial literacy, limited access to technology, cybersecurity and privacy concerns, system integration issues and resistance to organisational change. Mediaty et al. (2025) suggested that the main challenges for SMEs are low financial literacy, limited access to technology, and problems in integrating AIS with existing business practices. Furthermore, Hasan et al. (2025) revealed that the integration of digital technologies in the accounting practices of SMEs was challenged by skill gaps, cost constraints, and cultural resistance. Therefore, a successful transformation of accounting to digital is not only dependent on access to technology, but also on organisational readiness, user capability, management support, and a clear understanding of how accounting systems can support SME business needs.

As a general rule, literature indicates that digital transformation has become an important trend in the accounting of SMEs because it affects the quality of the reporting, operational efficiency, compliance, decision-making and competitiveness of the business. But the uptake of digital accounting technologies is still patchy because of constraints of resources, skills, security and organisational readiness. This provides a basis to examine the development and scope of next-generation accounting technologies that are increasingly changing the accounting practices in SMEs.

Evolution and Scope of Next-Generation Accounting Technologies

Accounting technologies have evolved from manual bookkeeping and basic computerised accounting systems towards cloud-based platforms, automated processes, intelligent analytics, and integrated digital ecosystems. Earlier forms of accounting digitalisation mainly focused on recording, processing, and storing financial transactions through accounting software and AIS. However, recent developments have shifted accounting from a primarily transaction-processing function towards a more analytical, automated, and decision-support function. Sampaio and Silva (2025) described this development as part of a wider transformation in accounting, where automation and artificial intelligence are increasingly integrated into accounting processes. Similarly, Al-Khoury et al. (2025) identified artificial intelligence, machine learning, blockchain, cloud computing, robotic process automation, and data analytics as key emerging technologies shaping the AIS field.

“Next-generation accounting technologies” encompasses a wide range of new digital technologies that expand accounting functions beyond their traditional scope through automation, connectivity, data processing and analytical capabilities. This study discusses cloud accounting, artificial intelligence (AI), blockchain technology and big data analysis for the literature review purpose as they are often related to digital transformation of accounting practices (Moll & Yigitbasioglu, 2019; Sanz Martín et al., 2026). However, the bibliometric analysis has a wider scope to capture other relevant emerging technologies in the SME accounting research. Together, these technologies provide the ability to record financial transactions, report in real time, automate repetitive tasks, analyse data to predict future

outcomes, provide audit trails, detect fraud, integrate data, and make strategic decisions. In this sense, the evolution of accounting technologies shows a transition from systems primarily designed for recording and processing historical financial data to more intelligent and integrated systems capable of producing insights, identifying anomalies, aiding forecasting and increasing accountability. This is particularly meaningful for SMEs, where the use of such technologies can help to overcome resource constraints by improving process efficiency, reducing manual errors, and providing more timely and useful financial information.

Cloud accounting is one of the most established technologies within the scope of next-generation accounting practices. It allows financial data to be stored, accessed, and processed through internet-based platforms, enabling SMEs to use accounting systems without heavy investment in local servers or complex IT infrastructure. For SMEs, cloud accounting can improve accessibility, flexibility, collaboration, and reporting timeliness. Studies show that cloud accounting adoption is influenced by technological, organisational, environmental, and individual factors, including perceived usefulness, cost-effectiveness, compatibility, vendor support, security, privacy, and top management support (Tawfik et al., 2022; Permatasari et al., 2025; Putri et al., 2025; Septiawan et al., 2025). Although cloud accounting offers clear benefits, its adoption may be limited by cybersecurity concerns, lack of IT expertise, and uncertainty regarding data control and system reliability.

Artificial intelligence and robotic process automation are another important stage in the evolution of accounting technologies. These tools are increasingly used to automate routine accounting activities such as invoice processing, transaction classification, bank reconciliation, payroll processing, report generation and audit testing. AI-based systems can also be used in fraud detection, anomaly detection, risk assessment, forecasting and financial analysis. Alruwaili and Mgammal (2025) stated that the use of artificial intelligence can change the accounting practices through facilitating the automation of processes easily, improving the accuracy of reporting, reducing fraud, and guaranteeing compliance with regulations. Le Dinh et al. (2025) also discussed the potential of AI in SMEs in various business functions, including finance and accounting applications such as credit risk assessment, cash flow prediction, fraud detection, and decision-making support. However, there are also challenges for SMEs in terms of cost, data quality, technical expertise, algorithmic bias, ethical use and workforce readiness for AI application in accounting.

Blockchain technology has also become part of the broader discussion on next-generation accounting technologies. In accounting and auditing, blockchain is commonly associated with distributed ledgers, transaction verification, smart contracts, audit trails, and improved transparency of financial records. Its potential lies in strengthening trust, traceability, and security in accounting information. However, blockchain adoption in SME accounting remains relatively limited compared to cloud accounting and AI-based tools because it often requires higher technical knowledge, regulatory clarity, and ecosystem readiness. Al-Khoury et al. (2025) positioned blockchain as one of the emerging technologies in AIS, while Sampaio and Silva (2025) linked blockchain with broader developments in accounting automation and digital transformation. For SMEs, the practical value of blockchain may depend on whether the technology can be integrated into affordable, user-friendly, and regulation-compliant accounting solutions.

Big data analysis and integrated accounting platforms also add to the scope of next-generation accounting technologies. Analysis of big data enables organisations to analyse large volumes of financial and non-financial data for purposes of forecasting, performance evaluation, customer analysis, risk management and strategic planning. Integrated accounting platforms, such as enterprise resource planning systems and connected business applications, link accounting data to sales, inventory, procurement, payroll, taxation and customer management functions. Connecting financial records with the wider business activities may improve the completeness and usefulness of accounting information. For SMEs, the integration is worth the effort as it can result in less duplication of work, better internal control and the support of more informed decision-making. However, the benefits are dependent on system compatibility, user skills, data governance and the ability of SMEs to align technology with business processes.

The definite shift from manual and computerised accounting to cloud-based, automated, intelligent and integrated systems represents the general development of accounting technologies. The scope of next-generation accounting technologies in SMEs include cloud accounting, artificial intelligence, robotic process automation, blockchain, large-scale data analysis and integrated accounting platforms. These technologies present opportunities for SMEs to improve efficiency, accuracy, transparency, compliance and decision making, but also present challenges regarding cost, skills, cybersecurity, data quality, integration and organisational change.

To summarise, the literature suggests that next-generation accounting technologies have become more relevant in enabling accounting transformation for SMEs. Studies have investigated different technologies, adoption factors, benefits and challenges. However, the literature is spread across different technological domains, SME contexts, countries and theoretical perspectives. Such fragmentation highlights the need to map the research landscape to identify dominant themes, emerging trends and future research directions in the study of next-generation accounting technologies in SMEs.

Research Methodology

This study employed a bibliometric analysis approach to examine the research landscape, emerging trends, and future directions of next-generation accounting technologies in SMEs. Bibliometric analysis was considered appropriate because it enables the systematic examination of publication patterns, influential sources, keyword relationships, thematic development, and research fronts within a specific research field (Donthu et al., 2021).

Bibliographic data were extracted from the Scopus database. Scopus was chosen due to its comprehensive coverage of peer-reviewed academic publications and its provision of bibliographic data suitable for bibliometric analysis, such as titles, abstracts, keywords, authors, affiliations, citations, source titles, and publication years. The search strategy was developed based on three conceptual blocks that reflect the scope of this study: SMEs, accounting and technology. This framework was applied to verify that the fetched publications were pertinent to the small business domain, accounting practices and next-generation or emerging digital technologies.

The search was performed in Scopus using the fields of title, abstract and keywords. The search string used in this study was:

TITLE-ABS-KEY ("SMALL AND MEDIUM ENTERPRISE*" OR "SMALL AND MEDIUM-SIZED ENTERPRISE*" OR SME* OR MSME* OR "SMALL BUSINESS*" OR "SMALL FIRM*") AND ("ACCOUNTING INFORMATION SYSTEM*" OR "DIGITAL ACCOUNTING" OR "E-ACCOUNTING" OR "ACCOUNTING TECHNOLOG*" OR "CLOUD ACCOUNTING" OR "ACCOUNTING SOFTWARE" OR "COMPUTERISED ACCOUNTING" OR "COMPUTERIZED ACCOUNTING") AND ("NEXT-GENERATION TECHNOLOG*" OR "EMERGING TECHNOLOG*" OR "DIGITAL TECHNOLOG*" OR "FINANCIAL TECHNOLOG*" OR FINTECH OR AUTOMATION OR "CLOUD COMPUTING" OR "ARTIFICIAL INTELLIGENCE" OR AI OR "ROBOTIC PROCESS AUTOMATION" OR RPA OR "BIG DATA" OR "DATA ANALYTICS") AND PUBYEAR > 2015 AND PUBYEAR < 2027 AND (LIMIT-TO (SRCTYPE , "j")) AND (LIMIT-TO (DOCTYPE , "ar")) AND (LIMIT-TO (SUBJAREA , "BUSI")) AND (LIMIT-TO (LANGUAGE , "English"))

The Scopus search was conducted on 2 July 2026 and initially retrieved 1,106 documents. The records were subsequently screened against pre-determined inclusion and exclusion criteria. Only journal articles published in English between 2016 and 2026 were included and classified under the Business, Management and Accounting subject area. We excluded publications before 2016, non-journal and non-research article types, non-English and publications outside the subject area of interest. After the application of these criteria, 428 articles were selected for the final bibliometric analysis. The 2016–2026 period was selected to capture the most recent decade of research development in digital and next-generation accounting technologies. As the data were retrieved on 2 July 2026, the publication count for 2026 represents only records indexed in Scopus up to the retrieval date and should therefore be regarded as incomplete for the full calendar year.

The final bibliographic records were exported from Scopus in CSV format and analysed using VOSviewer. VOSviewer was selected because it supports the construction and visualisation of bibliometric networks, including keyword co-occurrence, citation analysis, and bibliographic coupling (van Eck & Waltman, 2010). The analysis focused on five outputs: annual publication trends, country-level publication distribution, keyword co-occurrence, bibliographic coupling of documents, and citation analysis of sources. Together, these outputs provide a structured basis for examining the growth of the field, its geographical concentration, dominant research themes, major research fronts, and influential publication outlets.

Discussion

This section discusses the bibliometric results obtained from the final dataset of 428 Scopus-indexed journal articles. The discussion begins with the overall publication trend to show how scholarly interest in next-generation accounting technologies in SMEs has developed over time. It then examines the geographic distribution of publications and then the thematic and intellectual structure of the field using analyses of keyword co-occurrence and bibliographic coupling. Finally, the section presents the most influential sources of publications based on the citation analysis.

Annual Publication Trends

The annual publication trend was analysed to study the development of the scholarly interest of next-generation accounting technologies in SMEs.

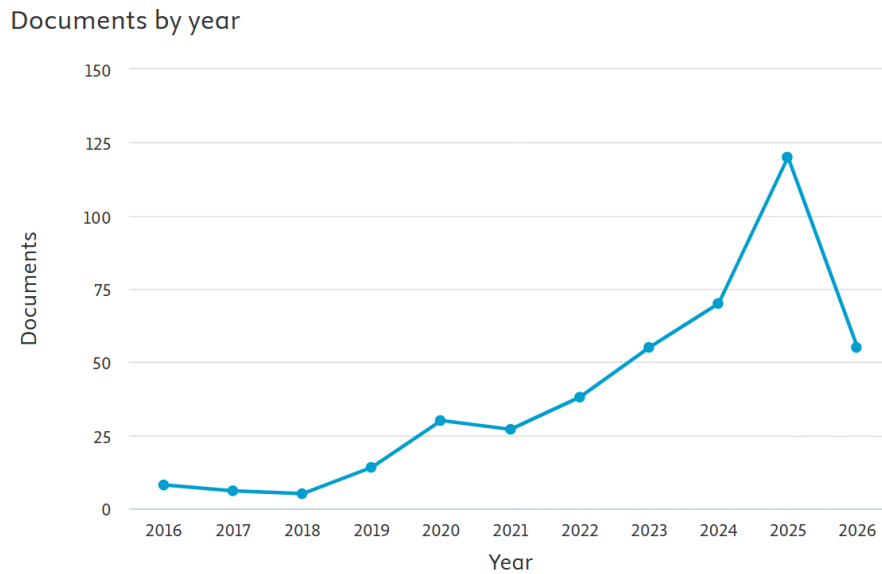


Figure 1. Annual Publication Trend on Next-Generation Accounting Technologies in SMEs

Source: Scopus

As can be seen in Figure 1, the number of publications was rather low from 2016 to 2018. Less than ten documents were recorded every year. This implies that research connecting SMEs, accounting practices and emerging digital technologies was still in its infancy during this period. After 2019, the number of publications increased, from approximately 15 documents in 2019 to about 30 in 2020. Although there was a slight dip in 2021, the overall trend is a clear upward trend.

The most significant growth occurred between 2022 and 2025, where publications increased from around 38 documents in 2022 to a peak of approximately 120 documents in 2025. This sharp rise indicates growing scholarly attention toward digital, automated, and intelligent accounting technologies in SME contexts. The trend is consistent with recent studies showing that accounting research has increasingly focused on digital transformation, automation, artificial intelligence, cloud accounting, big data analytics, and Industry 4.0-related technologies (Sampaio & Silva, 2025; Abdullah & Almaqtari, 2024). In SME contexts, these technologies are increasingly associated with improved reporting quality, cost efficiency, decision-making, automation, and financial management capabilities (Putri et al., 2025; Abbas, 2025).

The decline shown in 2026 should be interpreted cautiously because the year was still ongoing at the time of data collection. Therefore, the lower number of documents in 2026 is more likely due to incomplete publication and indexing rather than a decline in research interest. Overall, the trend confirms that next-generation accounting technologies in SMEs have become a growing and timely area of academic inquiry, particularly in the most recent years of the dataset.

Documents by Country

To identify the main geographical contributors to research on next-generation accounting technologies in SMEs, the distribution of publication at country level was analysed.

Documents by country or territory

Compare the document counts for up to 15 countries/territories.

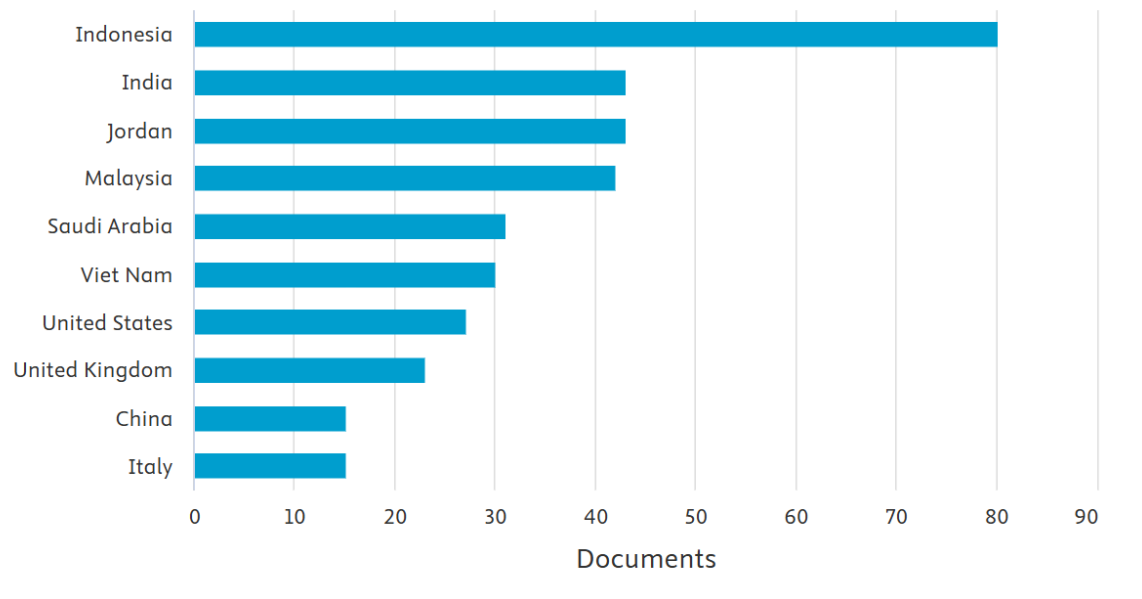


Figure 2. Distribution of Publications by Country or Territory

Source: Scopus

As seen in Figure 2, the highest number of publications was from Indonesia with around 80 documents. India and Jordan follow with about 43 documents each and Malaysia with approximately 42 documents. Saudi Arabia and Viet Nam also made significant contributions, with around 31 and 30 documents, respectively. Other contributors include the United States, United Kingdom, China and Italy, albeit with a lesser number of publications than the top Asian and Middle Eastern nations.

The dominance of Indonesia, India, Jordan, Malaysia, Saudi Arabia and Viet Nam suggests that research on next-generation accounting technologies in SMEs is highly concentrated in developing and emerging economy contexts. This trend is important as the SMEs of these countries are the main drivers of business activity and employment. However, they are confronted with the challenges of digital transformation in terms of cost, technical capability, human resources, infrastructure, and managerial readiness. Recent studies on SME digital transformation in developing countries also indicate that technology adoption is affected by organisational readiness, digital capability, resource availability and environmental pressures (Díaz-Arancibia et al., 2024; Faiz et al., 2024).

The strong representation of Indonesia and Malaysia is also consistent with the growing scholarly interest in cloud accounting, AIS, and technology adoption among SMEs in Southeast Asia. Studies in this context show that cloud accounting adoption is influenced by perceived usefulness, cost-effectiveness, compatibility, cybersecurity concerns, vendor support, and top

management support (Permatasari et al., 2025; Septiawan et al., 2025). This suggests that the geographical distribution is not merely a publication pattern but also reflects the practical need for digital accounting solutions in SME-intensive economies.

Overall, the country-level findings indicate that research on next-generation accounting technologies in SMEs is strongly shaped by Asian and Middle Eastern contexts, particularly developing and emerging economies. This supports the inclusion of “developing countries” as a relevant contextual theme in the keyword analysis and highlights the need for future comparative studies across regions, especially between emerging and developed economies.

Keyword Co-occurrence Analysis

We conducted a keyword co-occurrence analysis to identify the main themes and conceptual relationships in the literature on next-generation accounting technologies in SMEs.

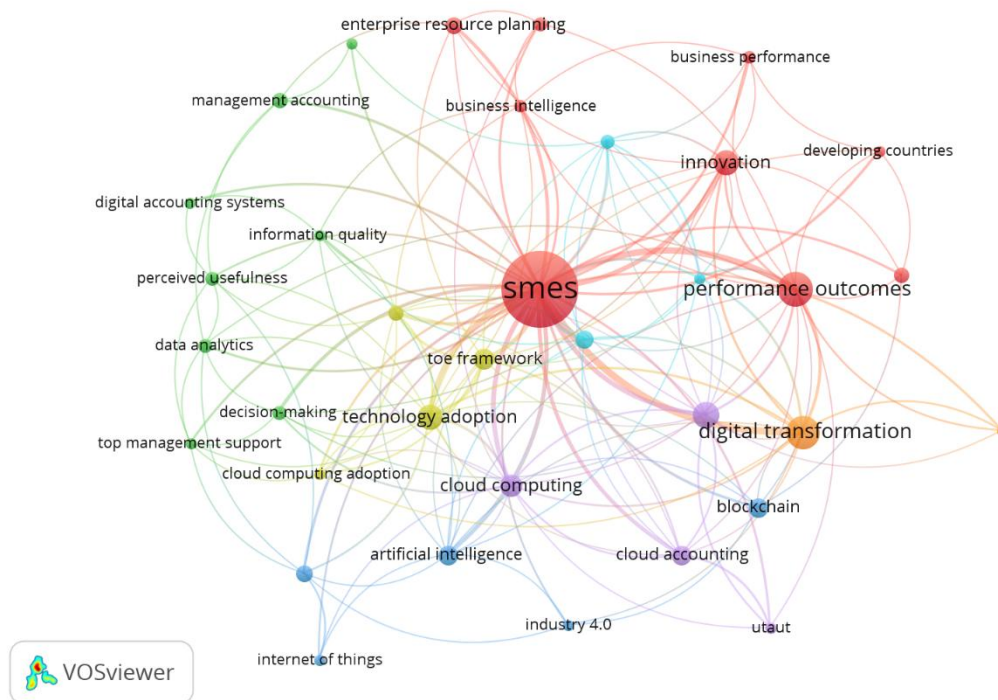


Figure 3. Keyword Co-Occurrence Network of Next-Generation Accounting Technologies in SMEs

Source: Scopus

As can be seen in Figure 3, the keyword “SMEs” is the most prominent keyword in the network with 208 occurrences and a total link strength of 217. This confirms that the literature is heavily grounded in the SME context, rather than accounting technologies in large organisations. Other important keywords are “performance outcomes” (44 occurrences, total link strength: 50), “digital transformation” (40 occurrences, total link strength: 54), and “technology adoption” (22 occurrences, total link strength: 41). The related terms imply that research in this area is not only limited to technology adoption per se but also to its implications for organisational improvement, digital transformation and business value creation. This aligns with recent studies on SME digital transformation that indicate a correlation between technology adoption

and competitiveness, performance, innovation capability, and organisational readiness (Díaz-Arancibia et al., 2024).

The second major theme is on technology adoption and adoption frameworks. Keywords: technology adoption; TOE framework; technology acceptance model; perceived usefulness; top management support; UTAUT. Many studies have been conducted to understand the reasons for the adoption and resistance of SMEs toward digital accounting technologies. It implies that the field is strongly influenced by the behavioural, organisational, technological and environmental explanations of adoption. Previous studies have demonstrated that the adoption of cloud-based accounting information systems is influenced by technological readiness, organisational support, environmental pressure, perceived usefulness, security concerns, and managerial commitment (Lutfi, 2022; Putri et al., 2025).

The map also shows a strong technology-oriented cluster around cloud computing, cloud accounting, artificial intelligence, blockchain, big data analytics, Industry 4.0, and the Internet of Things. Among these, cloud computing recorded 18 occurrences and a total link strength of 33, followed by artificial intelligence with 15 occurrences and a total link strength of 21, cloud accounting with 14 occurrences and a total link strength of 23, blockchain with 15 occurrences and a total link strength of 10, and big data analytics with 10 occurrences and a total link strength of 13. These keywords reflect the expansion of accounting technology research beyond traditional accounting information systems towards more advanced, automated, and data-driven solutions. Cloud accounting and cloud computing appear as prominent themes, indicating their importance as accessible and scalable technologies for SMEs. At the same time, the presence of artificial intelligence, blockchain, big data analytics, and Industry 4.0 suggests that the field is increasingly engaging with more advanced next-generation technologies that can support automation, transparency, analytics, and decision-making in accounting practices (Al-Khoury et al., 2025; Mauricette et al., 2022).

Another visible theme deals with accounting information systems, digital accounting systems, management accounting, information quality, data analytics and decision making. This shows that researchers are interested in not only technologies themselves but also the ways in which these technologies enhance the quality, usefulness and strategic value of accounting information. The interconnections between these terms suggest that next-generation accounting technologies are seen more and more as instruments for improving information quality, supporting managerial decisions and strengthening internal business processes.

Overall, the keyword co-occurrence map shows that the literature on next-generation accounting technologies in SMEs is organised around four main themes: SME digital transformation and performance, technology adoption frameworks, emerging accounting technologies, and accounting information quality and decision-making. These results indicate that the field has progressed from a narrow focus on accounting software and information systems to a wider research agenda that includes digital transformation, intelligent technologies, cloud-based systems and performance-oriented outcomes.

Bibliographic Coupling of Documents

By performing bibliographic coupling of documents, the main research fronts in the literature were identified. In this map, documents are identified by first author and year. In the discussion, some central documents are described briefly focusing on their research topic. Documents are

linked if they share references, implying that documents that are closely connected are likely to be based on similar intellectual sources. The minimum citation threshold was set to 25, which resulted in 89 documents in the first network. One weakly connected outlier was removed to improve the interpretability of the final visualisation.

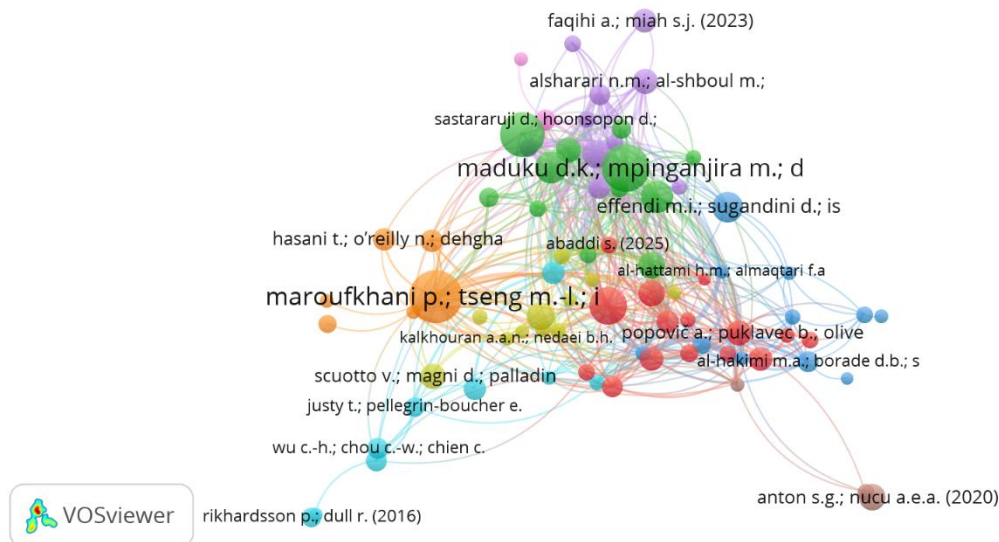


Figure 4. Bibliographic coupling network of documents

Source: Scopus

As shown in Figure 4, the bibliographic coupling network forms several interconnected clusters, suggesting that the literature is organised around related but distinguishable research fronts. The first major research front concerns SME digital technology adoption and performance. This is represented by central documents such as Maroufkhani et al. (2020), which focuses on big data analytics adoption and performance among SMEs, and Maduku et al. (2016), which examines technology adoption intention among South African SMEs using a multi-perspective framework. These studies show that a significant part of the literature is concerned with the factors influencing SME technology adoption and how such adoption contributes to business performance, innovation, and competitiveness.

The second research front relates more specifically to cloud accounting, accounting information systems, and SME performance. Documents such as Al-Okaily et al. (2023), which examines cloud-based accounting information systems usage and its impact on Jordanian SMEs' performance, indicate that accounting technology research is strongly connected to cloud-based systems, post-COVID-19 digitalisation, and the use of accounting information systems to improve organisational outcomes. This research front is particularly relevant to the present study because it directly links SME accounting practices with next-generation digital infrastructure.

The third research front is associated with digital capability, information quality, and decision-making. The close connections among documents in the network suggest that researchers increasingly view accounting technologies not only as tools for transaction processing, but also as systems that support better information quality, data use, managerial decision-making, and strategic value creation. This finding corresponds to the analysis of keyword co-occurrence

where the terms accounting information systems, data analytics, decision-making, technology adoption, and performance outcomes are found to be strongly associated.

Overall, the results of the bibliographic coupling analysis suggest that the current intellectual structure of the field is centred on three main research fronts: SME digital technology adoption and performance, cloud accounting and accounting information systems adoption, and the role of digital technologies in supporting information quality and decision-making. As opposed to the keyword co-occurrence map illustrating the general patterns of themes, the bibliographic coupling map offers a document-level perspective on the clustering of influential studies by shared references. Thus, this points out that future research can build on these established fronts by exploring more advanced next-generation accounting technologies such as artificial intelligence, blockchain, robotic process automation and big data analysis in more specific SME accounting contexts.

Citation Analysis of Sources

We conducted citation analysis of sources to determine the most influential publication outlets in the field. No clear visual clusters were created by the source citation network. Therefore, the results are presented in tabular form. Sources were filtered with a minimum threshold of 3 documents and 30 citations, and the top ten sources were ranked according to total citation count.

Table 1. Top 10 Most Cited Sources



Rank	Source	Documents	Citations
1	International Journal of Information Management	3	706
2	Cogent Business and Management	19	329
3	International Journal of Accounting Information Systems	8	324
4	Technological Forecasting and Social Change	7	293
5	Journal of Science and Technology Policy Management	7	284
6	Journal of Risk and Financial Management	7	265
7	Journal of Asian Finance, Economics and Business	5	231
8	Journal of Knowledge Management	3	187
9	Uncertain Supply Chain Management	11	187
10	Journal of Financial Reporting and Accounting	4	168

Source: Scopus

Table 1 shows that the International Journal of Information Management had a high citation count of 706 from just three documents. This implies that the journal, although not publishing the maximum number of articles in the dataset, has had a great impact on the field. It is followed by Cogent Business and Management with 329 citations from 19 documents, the most productive source among the top ten journals. The prominence of this journal indicates that research on SME accounting technologies is frequently embedded within broader business, management and digital transformation conversations.

The third and fourth most cited sources are International Journal of Accounting Information Systems and Technological Forecasting and Social Change with 324 and 293 citations respectively. Their presence demonstrates the interdisciplinary nature of the field. The former points to the accounting information systems basis of the literature, and the latter to the growing association of accounting technology, innovation, digital transformation, and future-oriented technological change. Further, other highly cited sources such as Journal of Science and Technology Policy Management, Journal of Risk and Financial Management, Journal of Knowledge Management, and Journal of Financial Reporting and Accounting show that the topic is not limited to accounting journals alone.

The analysis of source citations reveals that the research on next-generation accounting technologies in SMEs is dispersed across journals in accounting, information systems, business management, technology policy, innovation, finance, and knowledge management. This is confirming the multidisciplinary nature of the field. The broader findings from the keyword co-occurrence and bibliographic coupling analyses, where accounting technologies were linked not only to accounting information systems, but also to digital transformation, technology adoption, innovation, performance outcomes and decision-making, are also supported. The most influential publication venues suggest that this research area is at the intersection of accounting, digital technology, SME management and organisational performance.

The results of bibliometrics can clearly provide quantitative evidence for the rapid development and structure of this research field. From 2016 to 2018, the number of publications was below ten per year, but by 2025, this number has increased to approximately 120, indicating a remarkable growth in academic attention. The leading country in terms of contributing to the publications was Indonesia with around 80 publications, followed by India and Jordan with around 43 publications and Malaysia with around 42. The keyword co-occurrence analysis revealed “SMEs” as the most prominent and central keyword, with 208 occurrences and a total link strength of 217. Other prominent themes include “performance outcomes” (44 occurrences), “digital transformation” (40 occurrences), and “technology adoption” (22 occurrences), which reflect the strong linkage between technology adoption, digital transformation, and the performance of SMEs. Bibliographic coupling also identified three key research fronts including SME digital technology adoption and performance, cloud accounting and accounting information systems, and digital technologies for information quality and decision-making. The International Journal of Information Management was the most impactful source by citations (706 citations from three documents). Cogent Business and Management was the most prolific of the leading sources (19 documents, 329 citations).

Conclusion

This study examined the research landscape, emerging trends, and future directions of next-generation accounting technologies in SMEs through a bibliometric analysis of 428 Scopus-

indexed journal articles published between 2016 and 2026. The findings show that this research area has expanded rapidly in recent years, particularly from 2022 onwards, reflecting growing scholarly attention to digital transformation, cloud accounting, artificial intelligence, automation, blockchain, big data analytics, and related technologies in SME accounting contexts.

The results show that research in this field is driven by technological and organisational issues. On the other hand, the literature indicates the increasing role of advanced digital instruments in the quality of accounting information, reporting efficiency, decision making and business performance. Conversely, it also suggests that the adoption is still driven by SME-specific factors such as digital readiness, resource constraints, managerial support, perceived usefulness, cybersecurity concerns and organisational capability. The country-level results also show that this topic is especially relevant for developing and emerging economies, where SMEs are economically important but often encounter more barriers to digital transformation. This study contributes to the literature by providing an SME-specific bibliometric perspective on next-generation accounting technologies, extending previous reviews that have generally examined digital accounting technologies in broader accounting, finance, or organisational contexts. Rather than examining individual technologies in isolation, this study brings together a broader range of emerging accounting technologies and demonstrates how they are connected to SME digital transformation, technology adoption, organisational performance, information quality, and decision-making. The analysis further reveals that the field is strongly concentrated in developing and emerging economies and is structured around three main research fronts: SME digital technology adoption and performance, cloud accounting and accounting information systems, and digital technologies for information quality and decision-making. These findings provide new insight into how research on SME accounting technologies has evolved from a traditional focus on accounting information systems towards a more integrated agenda involving cloud-based, intelligent, automated, and data-driven technologies.

Future research should move away from general talks about advanced technologies to specific issues remaining unresolved in SME accounting. There is a need for more emphasis on the adoption and practical implementation of artificial intelligence (AI), blockchain, robotic process automation and big data analysis, including the organisational, financial and technical factors that influence their implementation. Cybersecurity, data privacy and digital accounting skills should also be explored in further studies as these factors may impact on SMEs' readiness and ability to use technology effectively. Further comparative research between developed and developing countries would be valuable so as to explain the influence of infrastructure, regulation, institutional support, digital maturity and resource availability on technology adoption and its outcomes. In addition, future empirical and longitudinal research are required to assess the impacts of the adoption of these technologies on accounting quality, compliance, financial decision-making, operational efficiency and the long-term performance of the business.

This study has a number of limitations. First, the analysis was limited to the documents indexed in Scopus which may exclude relevant studies from other databases such as Web of Science, Google Scholar or regional journal platforms. Second, the scope of the study was limited to the English language journal articles within the Business, Management and Accounting subject area, which may have limited the coverage of interdisciplinary or non-English research. Third, citation-based indicators could penalise recent publications, which have had less time to receive citations. Notwithstanding these limitations, the study provides a valuable basis for

comprehending the evolution of research on next-generation accounting technologies in SMEs and offers direction for future scholarly inquiry.

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