

## FINANCIAL TECHNOLOGY, BIG DATA, AND ACCOUNTING INFORMATION QUALITY: A BIBLIOMETRIC ANALYSIS

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### Abstract

This study presents a bibliometric analysis of scholarly research situated at the intersection of financial technology (FinTech), big data analytics, and accounting information quality. Drawing on a corpus of 215 peer-reviewed journal articles indexed in the Scopus database and published between 1984 and 2026, the analysis applies performance analysis and science-mapping techniques to chart the intellectual structure, productivity patterns, and emerging themes of this rapidly maturing field. The corpus has attracted 4,129 citations, with a mean of 19.2 citations per document and a corpus h-index of 30. The findings reveal an exponential acceleration of publication output after 2019, with annual production rising from sporadic single-digit counts in the early 2010s to 44 articles in 2025. Source-level analysis identifies Quality – Access to Success, the Journal of Financial Reporting and Accounting, and Cogent Business and Management as the most productive outlets, while geographic mapping highlights China, Indonesia, and the United States as the dominant contributing countries. Keyword co-occurrence analysis surfaces information technology, artificial intelligence, financial reporting, digital transformation, and blockchain as the conceptual pillars of the domain, with accounting information quality, big data, and cloud accounting representing the most salient emerging themes. The study concludes that the field has transitioned from a fragmented, technology-adoption perspective toward an integrated research agenda concerned with how digital infrastructures shape the relevance, reliability, and timeliness of accounting information. Implications for researchers, practitioners, and standard setters are discussed, alongside the limitations inherent in single-database bibliometric designs.

## 1. INTRODUCTION

The digitalization of the financial services sector over the past two decades has fundamentally reshaped the way economic information is produced, processed, and consumed. Financial technology—commonly abbreviated as FinTech—refers to the constellation of innovations, including mobile payments, peer-to-peer lending,

robo-advisory platforms, distributed ledgers, and algorithmic credit scoring, that leverage computational power to reconfigure traditional financial intermediation. Operating in close partnership with these innovations, big data analytics has supplied the methodological apparatus required to extract decision-relevant

insight from the high-volume, high-velocity, and high-variety data streams that now characterize digital finance. Together, these forces exert a profound influence on the accounting function, a discipline whose core mandate is the production of high-quality information for economic decision-making.

Accounting information quality is conventionally understood through the qualitative characteristics codified in conceptual frameworks issued by standard setters: relevance, faithful representation, comparability, verifiability, timeliness, and understandability. The proliferation of FinTech and big data technologies promises to enhance several of these attributes simultaneously—improving timeliness through real-time data capture, strengthening verifiability through immutable distributed ledgers, and enriching relevance through predictive analytics. Yet the same technologies introduce novel risks to information quality, including algorithmic opacity, data-governance failures, and the erosion of established audit trails. This tension between the enhancing and threatening potential of digital technologies has stimulated a substantial and rapidly growing body of academic inquiry.

Early contributions to this literature tended to treat technology adoption and accounting information as loosely coupled concerns. Foundational work on performance measurement argued that firms must move beyond financial accounting numbers toward a broader information architecture capable of capturing the drivers of competitive advantage (Eccles, 1991). In parallel, critical scholarship interrogated how the audit function constructs and legitimizes notions of information reliability (Humphrey & Moizer, 1990). As information technology matured, researchers began to examine its direct effects on accounting outcomes, investigating, for example, how advanced manufacturing information systems influence financial performance (Theodorou & Florou, 2008) and how cultural context conditions the design of effective information systems (Choe, 2004). More recently, the emergence of blockchain has catalyzed a distinct research stream concerned with the implications of distributed

ledger technology for the accounting system itself (Tan & Low, 2019; Yu et al., 2018).

Despite this accumulating scholarship, the intellectual structure of the field remains insufficiently mapped. Researchers entering the domain confront a fragmented literature distributed across accounting, information systems, finance, and computer science journals, with no consolidated account of the field's productivity dynamics, its most influential contributions, its geographic and institutional concentrations, or its evolving thematic frontiers. Bibliometric analysis offers a rigorous, reproducible methodology for addressing precisely this gap. By applying quantitative techniques to the metadata of published research, bibliometrics renders visible the latent structure of a scientific field and supports evidence-based assessments of its trajectory.

Accordingly, this study undertakes a comprehensive bibliometric analysis of research at the confluence of FinTech, big data, and accounting information quality. The investigation is guided by four research questions. First, what are the temporal productivity and citation dynamics of the field? Second, which sources, countries, and documents constitute its most influential elements? Third, what conceptual structure as revealed through keyword co-occurrence—organizes the domain? Fourth, which themes are emerging at the research frontier and warrant scholarly attention? By answering these questions, the study contributes a consolidated intellectual map that orients new researchers, informs practitioners and standard setters, and identifies promising avenues for future inquiry.

## 2. Conceptual Background

A coherent reading of the literature requires clarity about the three constructs whose intersection this study examines. Financial technology denotes the application of digital innovation to the design and delivery of financial services. Although the term entered common usage only in the past decade, its intellectual roots extend to longstanding research on the computerization of financial intermediation. Contemporary FinTech encompasses a heterogeneous portfolio of

technologies—mobile and contactless payments, distributed ledgers and cryptoassets, automated advisory systems, alternative credit scoring, and open-banking application programming interfaces—united by their reliance on computational data processing to disintermediate, accelerate, or augment traditional financial activity. For the accounting discipline, the significance of FinTech lies less in the technologies themselves than in the new data environments they create, which alter the volume, velocity, and provenance of the transactions that accounting systems must capture and represent.

Big data analytics constitutes the second construct and supplies the analytical complement to FinTech's data generation. Characterized by the familiar dimensions of volume, velocity, variety, and veracity, big data describes information assets whose scale and complexity exceed the capacity of conventional processing techniques. In the accounting context, big data analytics enables the interrogation of unstructured and semi-structured information—textual disclosures, sensor data, social media signals, and transaction logs—that traditional accounting systems were never designed to accommodate. The promise of these techniques is the extraction of forward-looking, decision-relevant insight; their peril lies in the governance, quality-assurance, and interpretive challenges that accompany analysis at scale. The literature reflects both faces of this duality, oscillating between optimistic accounts of analytic empowerment and cautionary treatments of data-quality risk.

Accounting information quality, the third and integrative construct, supplies the normative standard against which the consequences of FinTech and big data are evaluated. Conceptual frameworks promulgated by the major standard setters articulate a hierarchy of qualitative characteristics that render accounting information useful for economic decision-making. Relevance and faithful representation constitute the fundamental characteristics, while comparability, verifiability, timeliness, and understandability serve as enhancing characteristics. The central analytical question animating the field is whether, and under what conditions, digital technologies

strengthen or compromise these attributes. Distributed ledgers may enhance verifiability while raising new questions about the recognition and measurement of digital assets; predictive analytics may improve relevance while straining faithful representation; real-time data capture may advance timeliness while complicating the audit trail. The literature mapped in this study is, at root, an extended inquiry into these trade-offs.

The conjunction of these three constructs defines a research space that is simultaneously practical and theoretical. Practically, it speaks to the operational realities of finance functions adopting cloud-based enterprise systems, automated reconciliation tools, and analytics platforms. Theoretically, it engages enduring questions about the nature of accounting as an information system and the determinants of information usefulness. The bibliometric analysis that follows seeks to render the structure of this research space legible, charting how the scholarly community has organized its attention across these intersecting concerns.

### 3. Data and Methodology

This study adopts a bibliometric research design, a quantitative methodology that applies statistical and mathematical techniques to the bibliographic metadata of scholarly publications in order to characterize the structure and dynamics of a research field. Bibliometric methods are conventionally divided into two complementary families: performance analysis, which evaluates the productivity and impact of research constituents such as authors, sources, and countries; and science mapping, which reveals the conceptual and intellectual relationships among publications through techniques such as keyword co-occurrence and citation analysis. The present study mobilizes both families to deliver a holistic account of the domain.

The Scopus database, published by Elsevier, served as the single data source for this analysis. Scopus was selected on the strength of its broad coverage of peer-reviewed literature across the social sciences, business, and computer science, its rigorous indexing standards, and its widespread acceptance within the bibliometric research

community. The search strategy targeted the conceptual intersection of the focal constructs using the query string TITLE-ABS-KEY(Financial Technology AND Accounting Information Quality), which retrieves documents containing the relevant terms in their title, abstract, or keyword fields. To ensure the analytical corpus comprised mature, peer-validated scholarship, the results were refined to include only documents classified as journal articles and written in the English language.

The application of these inclusion criteria produced a final corpus of 215 journal articles published between 1984 and 2026. The complete bibliographic record for each document—including authorship, affiliation, source title, publication year, citation count, author keywords, index keywords, and abstract was exported from Scopus in comma-separated values format for subsequent analysis. Data cleaning was performed to harmonize inconsistencies in author keyword capitalization and to consolidate variant spellings of recurring terms, ensuring the validity of frequency-based measures. No further exclusions

were applied beyond the document-type and language filters, preserving the integrity of the retrieved sample.

Analysis proceeded in two phases. In the performance-analysis phase, descriptive indicators were computed to characterize annual scientific production, the distribution of citations across publication years, the productivity ranking of sources, the geographic distribution of contributing countries derived from author affiliations, and the identification of the most-cited documents. In the science-mapping phase, author keywords were extracted, normalized, and subjected to frequency analysis to reveal the conceptual structure of the field, with attention to the relative prominence of established versus emerging themes. All computations were performed using the Python programming language with the pandas library for data manipulation, and visualizations were produced using the matplotlib library. This transparent, reproducible workflow follows established protocols for bibliometric inquiry and supports the credibility of the reported findings.

**Table 1**

*Principal Bibliometric Indicators of the Corpus*

Indicator	Value
Documents (journal articles)	215
Timespan	1984–2026
Distinct sources	170
Total citations	4,129
Average citations per document	19.2
Corpus h-index	30
Uncited documents	48
Single-authored documents	42
Average authors per document	2.76
Distinct author keywords	769

4. Results and Analysis

4.1 Annual Scientific Production and Citation Dynamics

The temporal distribution of scientific production provides the first window onto the field's development. As illustrated in Figure 1, annual publication output remained low and intermittent throughout the early period of the corpus, with the years between 2010 and 2018 collectively producing fewer than thirty articles and several years yielding only a single indexed contribution. This sparse early output is consistent with a nascent field in which the conceptual links between digital financial technologies and accounting information quality had yet to be widely articulated.

A pronounced inflection occurs in 2019, when annual production rises to sixteen articles—more than tripling the preceding year's output. This acceleration coincides with the maturation of blockchain scholarship and the broader diffusion of FinTech into mainstream financial practice. Output subsequently sustains its upward trajectory, reaching nineteen articles in 2022, twenty-eight in 2024, and a corpus maximum of forty-four articles in 2025. The nineteen articles

already recorded for the partial year 2026 suggest that this momentum shows no sign of abating. The overall pattern describes an exponential growth curve characteristic of a field transitioning from emergence to rapid expansion, signaling intensifying scholarly investment in the questions at the heart of this review.

The citation dynamics of the corpus, depicted in Figure 2, offer a complementary perspective on scholarly impact. The 215 articles in the corpus have collectively attracted 4,129 citations, corresponding to a mean of 19.2 citations per document and a corpus h-index of 30—indicating that thirty articles have each been cited at least thirty times. Notably, citations accumulate with a temporal lag relative to production: although recent years dominate publication counts, the years 2019 and 2022 stand out as peaks of citation accumulation, reflecting the influence of several highly cited contributions published in those years. The presence of forty-eight uncited articles, predominantly among the most recent cohort, is expected given the citation window required for newly published research to attract scholarly attention.

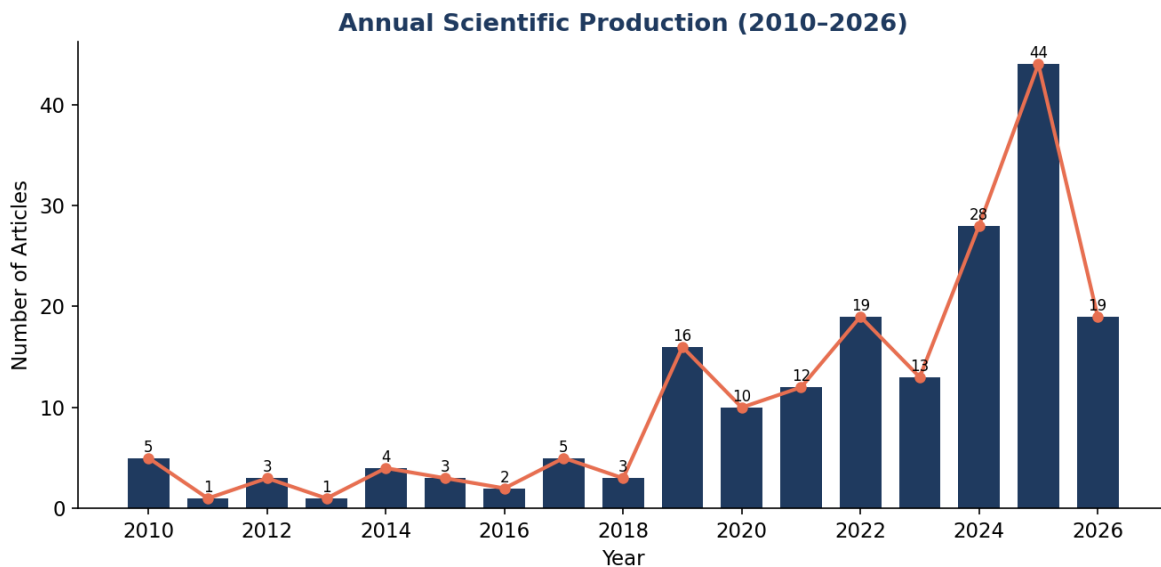


Figure 1. Annual scientific production, 2010–2026.

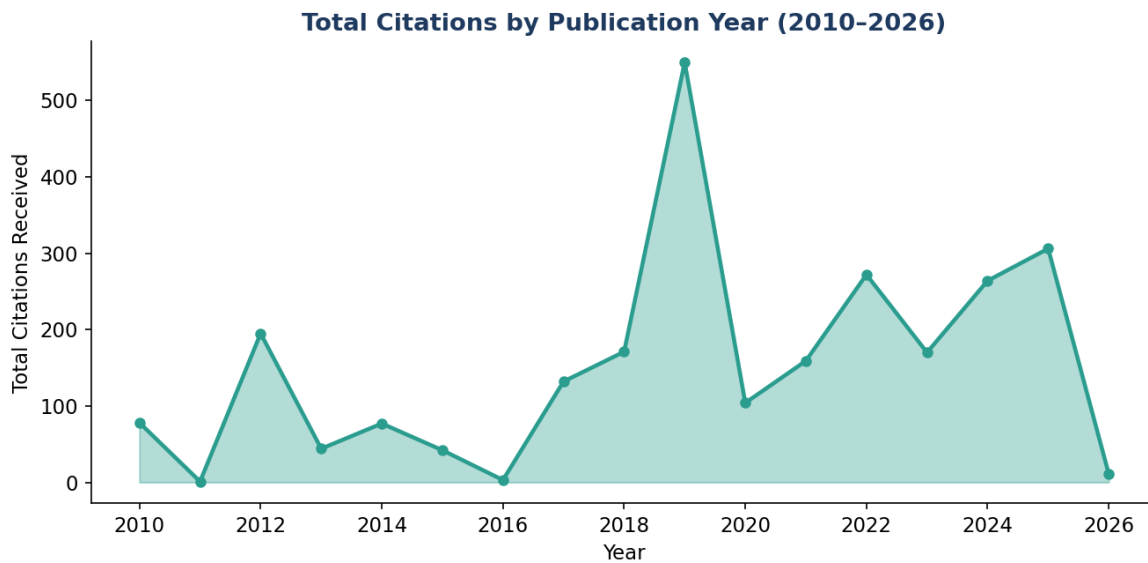


Figure 2. Total citations received by publication year, 2010–2026.

#### 4.2 Most Productive Sources

The distribution of the corpus across publication venues illuminates the disciplinary homes of the field. The 215 articles are dispersed across 170 distinct sources, a high degree of fragmentation that reflects the inherently interdisciplinary character of research spanning accounting, information systems, finance, and quality management. As Figure 3 and Table 2 show, the most productive single outlet is Quality – Access to Success, which published six articles, followed closely by the Journal of Financial Reporting and Accounting and Cogent Business and Management, each contributing five articles.

The composition of the leading sources is instructive. The prominence of dedicated accounting journals such as the Journal of Financial Reporting and Accounting and the

Review of Accounting and Finance signals that the accounting discipline has substantively engaged with the digital-technology agenda rather than ceding it to adjacent fields. At the same time, the appearance of broad business and management outlets such as Cogent Business and Management and Quality – Access to Success indicates that the topic resonates with a wider managerial audience concerned with organizational quality and performance. The inclusion of the Journal of Risk and Financial Management and Sustainability further suggests that the field intersects with contemporary concerns about financial risk governance and sustainable business practice. This source profile confirms that research on FinTech, big data, and accounting information quality occupies a genuinely interdisciplinary space rather than a single disciplinary silo.

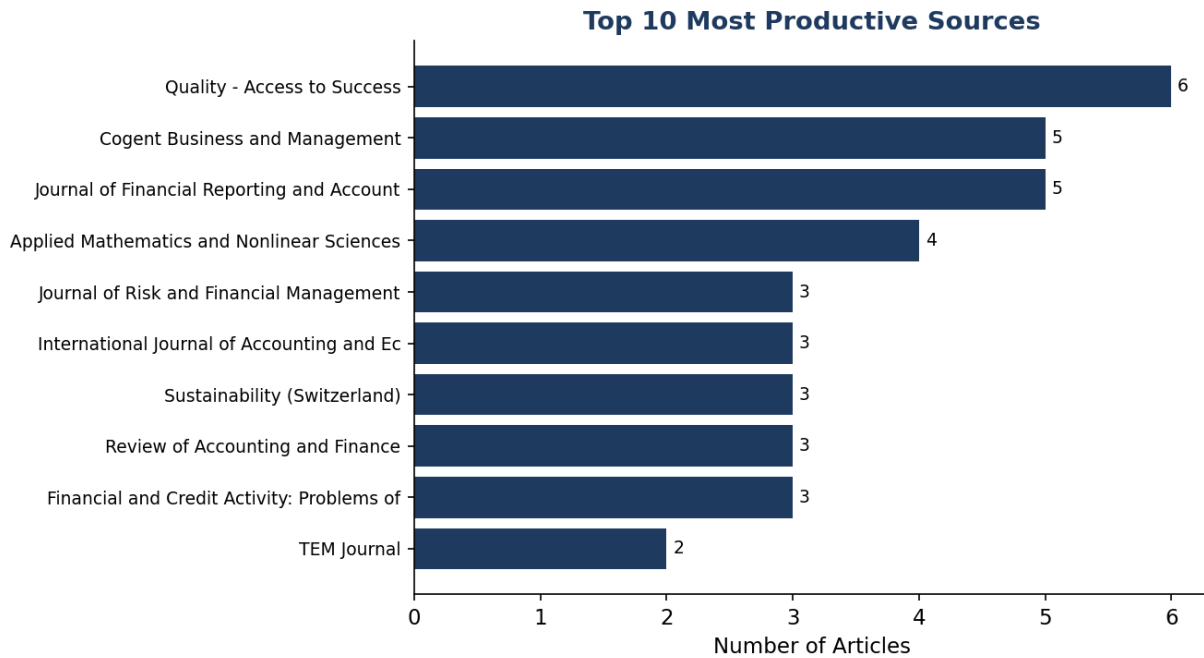


Figure 3. Ten most productive sources by article count.

Table 2

Ten Most Productive Sources

Rank	Source Title	Articles
1	Quality - Access to Success	6
2	Journal of Financial Reporting and Accounting	5
3	Cogent Business and Management	5
4	Applied Mathematics and Nonlinear Sciences	4
5	Journal of Risk and Financial Management	3
6	Review of Accounting and Finance	3
7	Sustainability (Switzerland)	3
8	Financial and Credit Activity: Problems of Theory and Practice	3
9	International Journal of Accounting and Economics Studies	3
10	TEM Journal	2

### 4.3 Geographic Distribution of Research

The geographic distribution of scholarly contributions, derived from author affiliations and presented in Figure 4 and Table 3, reveals a research community with distinct centers of

gravity. China emerges as the single most prolific contributor, associated with thirty-six articles, followed by Indonesia with thirty-four and the United States with twenty-five. The strong representation of China and the United States is

unsurprising given their status as global leaders in both technological innovation and accounting scholarship. The remarkable productivity of Indonesia, however, is a distinctive feature of this field and reflects the country's vigorous national research agenda on digital transformation in accounting and its large community of accounting academics.

Beyond the leading three nations, the geographic profile exhibits notable concentrations in the Middle East and Eastern Europe. Jordan, with fourteen affiliated articles, anchors a cluster of Middle Eastern scholarship that is corroborated by the recurrence of Jordanian institutions among the most productive affiliations and by the

appearance of "Jordan" itself among the most frequent author keywords. This regional prominence is consistent with sustained governmental and academic investment in financial-technology research across the Gulf and Levant. The presence of Iraq, Ukraine, Romania, and the Russian Federation among the leading contributors further demonstrates that the field has attracted substantial engagement from emerging and transition economies, where digital financial infrastructure is often viewed as a lever for institutional modernization. The breadth of this geographic distribution underscores the global relevance of the relationship between digital technology and accounting information quality.

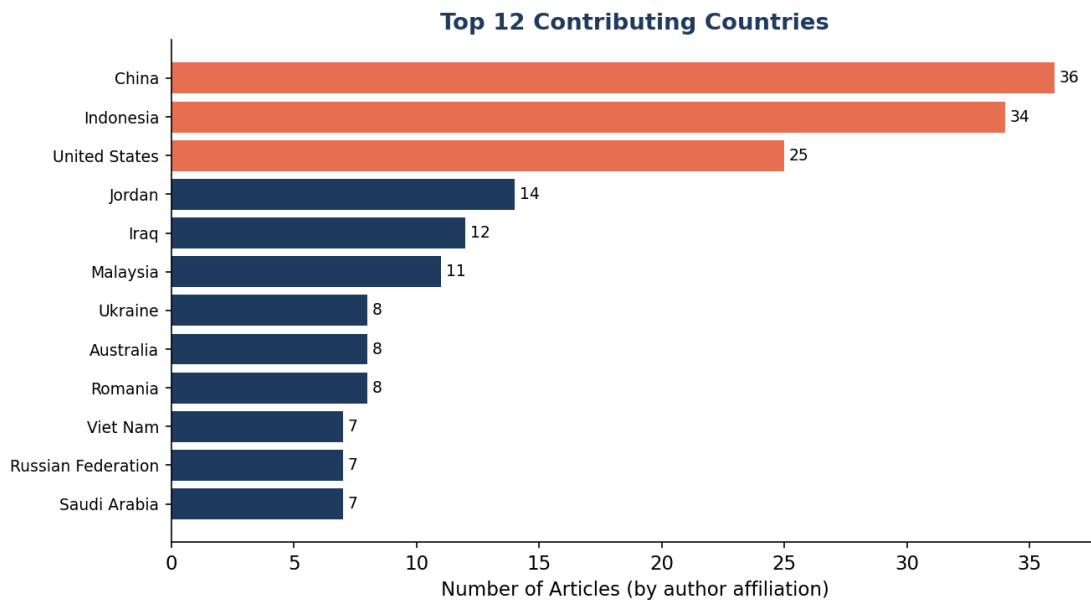


Figure 4. Ten most productive countries by author affiliation.

Table 3

*Ten Most Productive Countries*

Rank	Country	Articles
1	China	36
2	Indonesia	34
3	United States	25
4	Jordan	14
5	Iraq	12
6	Malaysia	11
7	Ukraine	8
8	Romania	8
9	Australia	8
10	Viet Nam	7

#### 4.4 Most Influential Documents

Citation analysis identifies the documents that have exerted the greatest intellectual influence on the field and, by extension, reveals its foundational ideas. Table 4 presents the ten most-cited articles in the corpus. The single most influential document is Eccles's (1991) performance measurement manifesto, which has attracted 826 citations. Although predating the FinTech era, this work established the conceptual case for moving beyond conventional financial accounting toward a richer, technology-enabled information architecture—an argument that continues to animate contemporary research on digital accounting information quality.

The remaining highly cited works cluster around several identifiable intellectual streams. A prominent blockchain stream is represented by Yu et al. (2018), with 161 citations, and Tan and Low (2019), with 123 citations, both of which examine how distributed ledger technology can be incorporated into the accounting system to enhance the reliability and integrity of financial

records. A second stream addresses the broader relationship between information technology and organizational or environmental outcomes, exemplified by Haseeb et al. (2019), the second most-cited document with 305 citations, which investigates the role of information and communication technologies in environmental quality. A third stream concerns the determinants and consequences of accounting information quality itself, encompassing Wyatt's (2005) analysis of intangible-asset recognition and Gavius et al.'s (2012) study of earnings management in high-technology firms. The COVID-19 pandemic also surfaces as a salient context, with Lutfi et al. (2022) examining the role of accounting information system implementation in sustaining small and medium-sized enterprises during the crisis. Collectively, these influential works trace the field's evolution from foundational performance-measurement theory toward an increasingly specific concern with how digital technologies shape the quality of accounting information.

**Table 4***Ten Most-Cited Documents in the Corpus*

Rank	Authors (Year)	Title	Citations
1	Eccles R.G. (1991)	The performance measurement manifesto.	826
2	Haseeb A. et al. (2019)	Does information and communication technologies improve environmental quality in the era of globalization? An empirical analysis	305
3	Yu T. et al. (2018)	Blockchain: The Introduction and Its Application in Financial Accounting	161
4	Wyatt A. (2005)	Accounting recognition of intangible assets: Theory and evidence on economic determinants	151
5	Gavious I. et al. (2012)	Female directors and earnings management in high-technology firms	145
6	Humphrey C. et al. (1990)	From techniques to ideologies: An alternative perspective on the audit function	136
7	Tan B.S. et al. (2019)	Blockchain as the Database Engine in the Accounting System	123
8	Lutfi A. et al. (2022)	Business Sustainability of Small and Medium Enterprises during the COVID-19 Pandemic: The Role of AIS Implementation	102
9	Theodorou P. et al. (2008)	Manufacturing strategies and financial performance-The effect of advanced information technology: CAD/CAM systems	78
10	Choe J.-M. (2004)	The consideration of cultural differences in the design of information systems	75

#### 4.5 Conceptual Structure and Emerging Themes

The conceptual structure of the field is most directly revealed through the analysis of author keywords, which function as authors' own characterizations of their contributions. Figure 5 and Table 5 present the fifteen most frequently occurring keywords after normalization. The keyword landscape is dominated by information technology, which appears twenty-two times, confirming that the technological dimension constitutes the organizing axis of the field. This is followed by accounting (fourteen occurrences), artificial intelligence and financial reporting (twelve occurrences each), and digital

transformation and blockchain (eleven occurrences each).

The prominence of artificial intelligence and digital transformation is particularly telling. These terms signal that the field has moved beyond a narrow preoccupation with discrete technologies toward a broader engagement with the systemic, organization-wide reconfiguration of the accounting function. The recurrence of blockchain among the leading keywords corroborates the citation analysis, confirming distributed ledger technology as a central pillar of contemporary inquiry. Meanwhile, the appearance of financial reporting and financial reporting quality among the most frequent terms

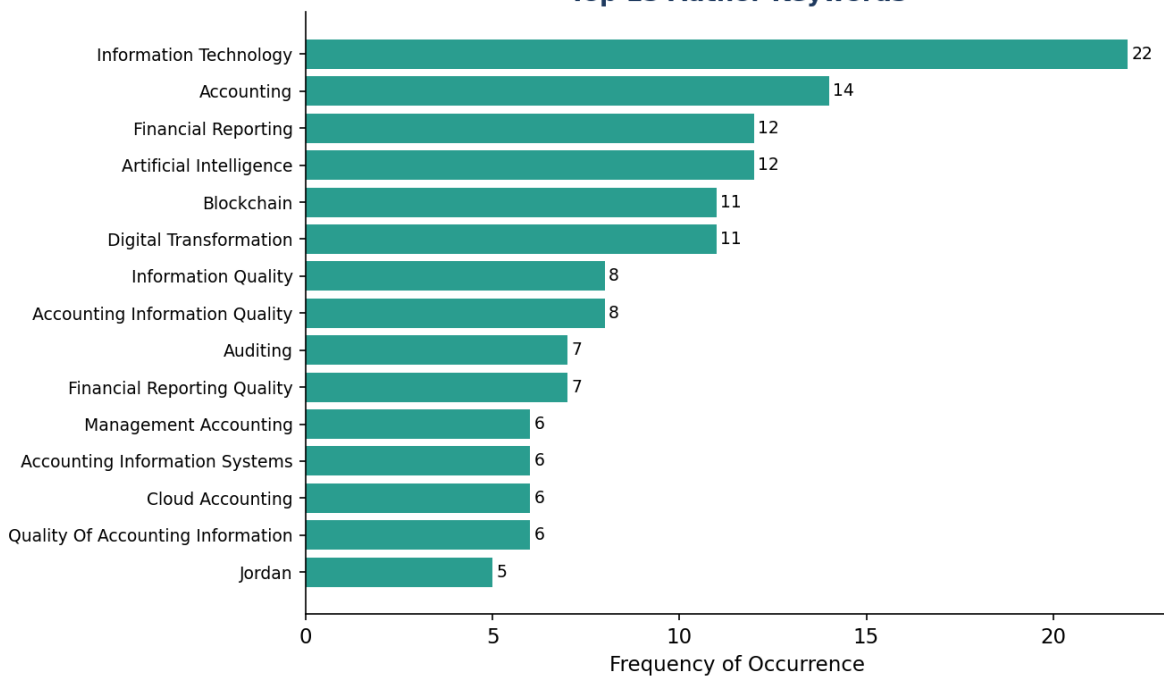
demonstrates that questions of information quality remain firmly at the conceptual core of the field, even as the technological toolkit evolves. A focused examination of the emerging frontier of the field reveals several themes poised for expansion. The construct of accounting information quality appears as an explicit author keyword eight times, with the closely related quality of accounting information adding a further six occurrences, indicating that researchers increasingly foreground information quality as a dependent construct shaped by technological adoption. Big data appears five times, and cloud accounting six times, signaling growing attention to the infrastructural foundations of digital accounting. The presence of XBRL, accounting information systems, and management accounting among the frequently occurring terms points to a maturing research program concerned with the practical instrumentation of digital accounting. Taken together, these emerging themes describe a research frontier organized around the proposition that big data infrastructures, artificial

intelligence, and cloud-based systems jointly determine the quality, timeliness, and relevance of the accounting information that organizations produce.

Several promising directions emerge from this thematic structure. First, the convergence of artificial intelligence and accounting information quality invites rigorous investigation into how machine-learning systems affect the relevance and faithful representation of financial information, including the governance challenges posed by algorithmic opacity. Second, the intersection of big data analytics and auditing—evidenced by the recurrence of auditing among the keywords—offers fertile ground for research into continuous, data-driven assurance. Third, the cloud accounting theme raises important questions about data security, jurisdictional control, and the reliability of information held in distributed infrastructures. These frontiers represent the natural trajectory of a field transitioning from documenting technology adoption toward theorizing its consequences for information quality.



**Top 15 Author Keywords**



**Figure 5. Fifteen most frequent author keywords (normalized).**

Table 5

*Fifteen Most Frequent Author Keywords*

Rank	Author Keyword	Frequency
1	Information Technology	22
2	Accounting	14
3	Artificial Intelligence	12
4	Financial Reporting	12
5	Digital Transformation	11
6	Blockchain	11
7	Information Quality	8
8	Accounting Information Quality	8
9	Financial Reporting Quality	7
10	Auditing	7
11	Cloud Accounting	6
12	Quality Of Accounting Information	6
13	Accounting Information Systems	6
14	Management Accounting	6
15	Information Systems	5

## 5. Discussion

The findings of this bibliometric analysis carry several implications for the development of the field. The exponential growth in publication output after 2019 confirms that the relationship between digital financial technologies and accounting information quality has crystallized into a coherent and self-sustaining research domain. This maturation creates both opportunity and obligation: opportunity in the form of a vibrant scholarly community generating cumulative knowledge, and obligation in the form of a need for greater theoretical integration to prevent the fragmentation that the high source-dispersion figures already hint at. The dispersion of 215 articles across 170 sources suggests a field still in search of intellectual consolidation, in which dedicated review and theory-building efforts—of which this study is one—are especially valuable.

The geographic findings invite reflection on the global distribution of research capacity. The prominence of Indonesia, Jordan, and other emerging economies alongside the established research powers of China and the United States indicates that the digital-accounting agenda is not the exclusive province of advanced economies. This diversity is a strength, enriching the field with varied institutional contexts and regulatory environments. It also raises the prospect of comparative research that exploits cross-national variation in technological infrastructure and accounting regulation to identify the conditions under which digital technologies most effectively enhance information quality.

For practitioners and standard setters, the thematic findings carry direct relevance. The centrality of blockchain, artificial intelligence, and cloud accounting in the research frontier signals

that these technologies are not speculative curiosities but active determinants of contemporary accounting practice. Standard setters confronting the implications of distributed ledgers for audit evidence, or the implications of machine-learning-generated estimates for faithful representation, will find in this literature a growing evidentiary base. The persistent salience of accounting information quality as a focal construct reassures the profession that technological enthusiasm has not displaced the discipline's enduring commitment to the qualitative characteristics that make accounting information useful.

A further implication concerns the methodological maturation of the field itself. The progression visible in the corpus—from conceptual and case-based early contributions toward empirically grounded studies leveraging the very data infrastructures under examination—suggests that the field is acquiring the methodological self-awareness characteristic of an established research program. Future contributions are likely to exploit large transactional datasets, natural-language processing of disclosures, and quasi-experimental designs that capitalize on the staggered adoption of digital technologies across firms and jurisdictions. The bibliometric evidence assembled here positions this methodological evolution as the next phase in the field's development, in which descriptive documentation of technology adoption gives way to causal theorizing about its effects on information quality. Researchers who anchor their work in the foundational contributions identified through this citation analysis, while engaging the emerging themes surfaced through keyword mapping, will be well placed to advance that agenda.

## 6. Conclusion, Limitations, and Future Research

This study has mapped the intellectual structure of research at the intersection of financial technology, big data, and accounting information quality through a bibliometric analysis of 215 Scopus-indexed journal articles published between 1984 and 2026. The analysis documents a field in rapid ascent, marked by exponential growth in scholarly production after 2019, a substantial

citation base of 4,129 citations and a corpus h-index of 30, and an interdisciplinary character evidenced by the dispersion of its output across 170 sources. Performance analysis identified the most productive sources and contributing countries, revealing leadership by China, Indonesia, and the United States, alongside notable contributions from Middle Eastern and Eastern European scholarship. Citation analysis surfaced the foundational works of the field, tracing its evolution from performance-measurement theory toward a specific concern with the consequences of blockchain, artificial intelligence, and information technology for accounting information quality. Keyword analysis revealed a conceptual structure organized around technology and information quality, with big data, cloud accounting, and artificial intelligence representing the most salient emerging themes.

The contributions of this study are threefold. For researchers, it provides a consolidated intellectual map that orients newcomers and identifies underexplored frontiers, particularly the governance of algorithmic accounting estimates and the development of continuous, data-driven assurance. For practitioners, it confirms the practical centrality of emerging digital technologies to the accounting function. For standard setters, it signals the growing evidentiary base on which to ground guidance concerning digital financial infrastructures.

Several limitations qualify these findings and suggest avenues for further work. The reliance on the Scopus database alone, while methodologically conventional, excludes documents indexed only in alternative databases such as Web of Science or Google Scholar; future research could triangulate across multiple sources. The restriction to English-language journal articles, adopted to ensure quality and comparability, omits potentially valuable scholarship in other languages and document types. Finally, the keyword-based approach to conceptual mapping, although informative, could be deepened through formal co-citation and bibliographic-coupling analyses that reveal the relational structure of the literature in greater detail. Notwithstanding these limitations, the present study offers a timely and

rigorous account of a field whose importance will only grow as digital technologies continue to transform the production of economic information.

### References

- Choe, J.-M. (2004). The consideration of cultural differences in the design of information systems. *Information & Management*, 41(5), 669-684. <https://doi.org/10.1016/j.im.2003.08.003>
- Eccles, R. G. (1991). The performance measurement manifesto. *Harvard Business Review*, 69(1), 131-137.
- Gavious, I., Segev, E., & Yosef, R. (2012). Female directors and earnings management in high-technology firms. *Pacific Accounting Review*, 24(1), 4-32. <https://doi.org/10.1108/01140581211221533>
- Haseeb, A., Xia, E., Saud, S., Ahmad, A., & Khurshid, H. (2019). Does information and communication technologies improve environmental quality in the era of globalization? An empirical analysis. *Environmental Science and Pollution Research*, 26(9), 8594-8608. <https://doi.org/10.1007/s11356-019-04296-x>
- Humphrey, C., & Moizer, P. (1990). From techniques to ideologies: An alternative perspective on the audit function. *Critical Perspectives on Accounting*, 1(3), 217-238. [https://doi.org/10.1016/1045-2354\(90\)03021-7](https://doi.org/10.1016/1045-2354(90)03021-7)
- Lutfi, A., Al-Khasawneh, A. L., Almaiah, M. A., Alsyof, A., & Alrawad, M. (2022). Business sustainability of small and medium-sized enterprises during the COVID-19 pandemic: The role of AIS implementation. *Sustainability*, 14(9), 5362. <https://doi.org/10.3390/su14095362>
- Tan, B. S., & Low, K. Y. (2019). Blockchain as the database engine in the accounting system. *Australian Accounting Review*, 29(2), 312-318. <https://doi.org/10.1111/auar.12278>
- Theodorou, P., & Florou, G. (2008). Manufacturing strategies and financial performance—The effect of advanced information technology: CAD/CAM systems. *Omega*, 36(1), 107-121. <https://doi.org/10.1016/j.omega.2005.10.005>
- Wyatt, A. (2005). Accounting recognition of intangible assets: Theory and evidence on economic determinants. *The Accounting Review*, 80(3), 967-1003. <https://doi.org/10.2308/accr.2005.80.3.967>
- Yu, T., Lin, Z., & Tang, Q. (2018). Blockchain: The introduction and its application in financial accounting. *Journal of Corporate Accounting & Finance*, 29(4), 37-47. <https://doi.org/10.1002/jcaf.22365>