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The Impact of Digitalization on Financial Accounting Practices : A Literature Review in the Scopus Database

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ABSTRACT

This study explores the development of research on the impact of digitalization on financial accounting practices. The objective is to analyze Scopus-indexed publications to identify key themes, theoretical approaches, research methods, and geographical focuses. A qualitative literature review was conducted, examining 207 articles published between 2006 and 2025 using the keyword "digitalization on financial accounting." The results indicate a significant increase in scholarly interest post-2018, with a surge in publications highlighting the growing importance of digital transformation in financial accounting. The research identifies key institutions and countries contributing to the discourse, with a notable influence from Eastern European institutions, particularly Russia. The publications predominantly comprise articles across business, management, accounting, computer science, and economics. In conclusion, digitalization has emerged as a critical area of academic inquiry in financial accounting, with profound implications for practice, regulation, education, and theory. The study emphasizes the need for a consolidated understanding of the evolving landscape and informs future research agendas. These findings suggest that the integration of digital technologies into financial accounting is reshaping the field, necessitating updated accounting practices, educational curricula, and regulatory frameworks.

Keywords: Digitalization, Financial, Accoounting, Literature, Scopus

INTRODUCTION

The digital revolution has fundamentally reshaped the landscape of financial accounting, influencing not only the way financial information is processed and reported but also how businesses interact with stakeholders. Digitalization, characterized by the integration of technologies such as artificial intelligence (AI), blockchain, big data analytics, and cloud computing, has triggered a transformative shift in accounting practices across the globe. This shift is not only technological but also strategic, demanding changes in accountants' roles, the skills they must possess, and the systems through which financial transparency and accountability are maintained (Abuzarqa & Tarnoczi, 2021; Alhasana & Alrowwad, 2022; Antipova & Rocha, 2020). The complexity and breadth of digitalization's impact on accounting underscore

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the need for a systematic review of how this topic has been explored in academic research, particularly in high-quality indexed journals such as those in the Scopus database.

Over the past decade, there has been a significant rise in scholarly interest concerning the interplay between digital innovation and financial accounting. Studies have examined various dimensions of this transformation, such as the adoption of accounting information systems, the role of AI in auditing, and the implications of blockchain for transaction recording and verification (Ionescu-Feleagă et al., 2022; Kucherenko Tamara et al., 2020; Ricci et al., 2020). These studies reflect an increasing recognition that accounting is no longer confined to traditional ledger-based systems but is becoming embedded within a dynamic digital ecosystem. However, despite the growing volume of research, the literature remains fragmented, lacking a cohesive understanding of key themes, methodologies, and theoretical approaches. Therefore, this literature review seeks to synthesize findings from Scopus-indexed articles to map the development of research on the impact of digitalization on financial accounting.

From an institutional and regulatory perspective, digitalization has also prompted shifts in accounting standards and policy frameworks. Many national and international accounting bodies have started to revisit existing guidelines to accommodate the realities of digital transactions, data security, and real-time reporting (Makarenko et al., 2022; Liermann & Stegmann, 2021). Furthermore, companies now face heightened scrutiny in data handling and compliance, making the digital competence of accounting professionals more critical than ever. This ongoing evolution challenges traditional accounting education and practice, necessitating continuous learning and adaptation. Researchers have highlighted that digitalization introduces both opportunities, such as efficiency gains and improved decision-making and threats, including cybersecurity risks and ethical dilemmas (Frolova et al., 2021; Sidaoui et al., 2022).

Empirical studies on this topic have approached digitalization's impact from diverse angles. Some focus on technological tools such as cloud accounting systems and ERP (Enterprise Resource Planning) platforms (Baydar & Arslan, 2019; Mustafina et al., 2020). Others explore the socio-technical dynamics of adoption, including resistance to change among accountants, organizational culture, and regulatory inertia (Kutsyk et al., 2022; Martić et al., 2017). Several studies have employed case-based and survey methodologies to assess the effectiveness of digital innovations in enhancing financial transparency, audit quality, and internal control systems (Suresh et al., 2019; Zhang, 2022). Collectively, these contributions form a rich, albeit disjointed, body of knowledge requiring synthesis to identify prevailing trends, challenges, and research gaps.

Moreover, the literature reflects varying degrees of digital maturity across countries and industries. While developed economies tend to lead in adopting advanced accounting technologies, developing countries face infrastructural, educational, and regulatory barriers (Shygun & Chystova, 2022; Zubach et al., 2021). Studies also reveal that sectoral differences play a critical role; for example, fintech companies are naturally more attuned to digital accounting practices compared to traditional manufacturing firms (Teller, 2006; Titko et al., 2021). These contextual variations further complicate efforts to derive generalizable conclusions. It is essential to analyze how regional

contexts influence the scope and pace of digital transformation in accounting practices, a gap that this review aims to address.

The theoretical underpinnings of this research field are equally diverse. Some studies are grounded in institutional theory, highlighting how organizational structures adapt to external technological pressures (Vartanova & Smirnov, 2018; Tikhomirov, 2019). Others employ contingency theory, focusing on how different environmental factors affect the success of digital implementation in accounting (Prasanna Ariyarathne et al., 2022). Still, others use innovation diffusion theory to examine the process through which digital technologies are adopted in accounting firms (Sikari & HariKrishnan, 2019). This plurality of theoretical frameworks indicates a vibrant but scattered field, making it imperative to assess which theories dominate, how they are applied, and what insights they offer regarding the digital transformation of accounting.

The primary objective of this literature review is to explore the development of research on the impact of digitalization on financial accounting practices as reflected in Scopus-indexed publications. This includes identifying key themes, theoretical approaches, research methods, and geographical focuses that characterize the current body of knowledge. By analyzing the evolution of scholarly contributions, this study aims to provide a clearer picture of how digitalization has reshaped financial accounting and what future research directions are needed to deepen understanding in this area.

In conclusion, digitalization represents a critical frontier in accounting research, with profound implications for practice, regulation, education, and theory. While individual studies offer valuable insights, there is a pressing need to consolidate these findings into a coherent narrative. A systematic literature review, grounded in Scopus data, provides a robust means of capturing the state of knowledge and informing future research agendas. Through this effort, scholars, practitioners, and policymakers can better grasp the dynamics of digital transformation in financial accounting and navigate the complexities of this evolving domain.

Several studies have contributed to understanding the impact of digitalization on financial accounting, yet important gaps remain. For instance, Ergeshova et al. (2023) examined the role of digital transformation in public sector accounting but focused primarily on implementation challenges, leaving questions about its long-term impact on financial reporting quality. Kulikova and Mukhametzyanov (2019) explored digital competencies required by accounting professionals, but their study was limited to a theoretical discussion without empirical validation. Olomskaya et al. (2021) investigated automation in accounting processes, emphasizing operational efficiency; however, they did not assess how automation affects professional judgment and decision-making. Lastly, Savić and Pavlović (2023) analyzed the integration of digital tools in corporate finance, but their scope did not cover implications for regulatory compliance or standard-setting.

These studies provide valuable insights but are often context-specific, fragmented, and methodologically narrow. They rarely adopt a comprehensive framework that captures the broader academic evolution on this topic. Therefore, a systematic literature review is needed to synthesize findings across contexts, identify dominant themes and methods, and reveal research gaps ultimately offering a clearer understanding of how digitalization has transformed financial accounting.

LITERATURE REVIEW

The ongoing wave of digital transformation is reshaping financial accounting practices across the globe. Scholars have investigated various aspects of this transformation, highlighting both the opportunities and challenges it presents to accountants, institutions, and regulators. A central theme in the literature is how digital tools, such as artificial intelligence (AI), blockchain, enterprise resource planning (ERP), and cloud computing, influence the reliability, speed, and transparency of financial reporting.

Digitalization has allowed for the automation of routine accounting processes, enhancing efficiency and reducing the likelihood of human error. Studies such as Meiryani et al. (2022) and Bychkova & Zabaznova (2021) demonstrate how automation and information systems improve the timeliness and accuracy of financial reports. Similarly, Schuh et al. (2020) and Song & Chen (2022) emphasize the transformative potential of blockchain in creating immutable, transparent financial records, though they acknowledge implementation challenges such as high costs and regulatory uncertainty.

At the same time, the literature also emphasizes the changing role of accountants. The integration of digital technologies requires new skillsets, particularly in data analytics and information systems. Alamin et al. (2020) and Ageeva et al. (2021) argue that digital competence is becoming essential for accountants, as traditional roles shift toward more strategic and advisory functions. Sergeev & Sergeev (2023) support this by discussing how digital tools redefine the competencies and responsibilities of financial professionals, aligning with the needs of a data-driven economy.

The implications of digitalization for financial control and regulatory compliance are also widely discussed. Cagle (2020) and Kozhoshev et al. (2022) explore how digital systems can enhance internal controls and support compliance with financial regulations. However, Kolomiiets (2019) and Selivanova et al. (2022) caution that the lack of standardized digital accounting frameworks can hinder cross-border comparability and raise new risks, including cybersecurity threats and algorithmic bias.

Despite these advances, the adoption of digital technologies is uneven across sectors and regions. Luneva et al. (2022) and Pirmatov et al. (2022) find that small and medium-sized enterprises (SMEs) often lack the infrastructure and expertise needed to adopt advanced digital systems, leading to a digital divide within the accounting profession. Similarly, Shirobokov et al. (2022) and Kadesnikova et al. (2023) note that digital maturity significantly influences how organizations perceive and implement digital accounting tools.

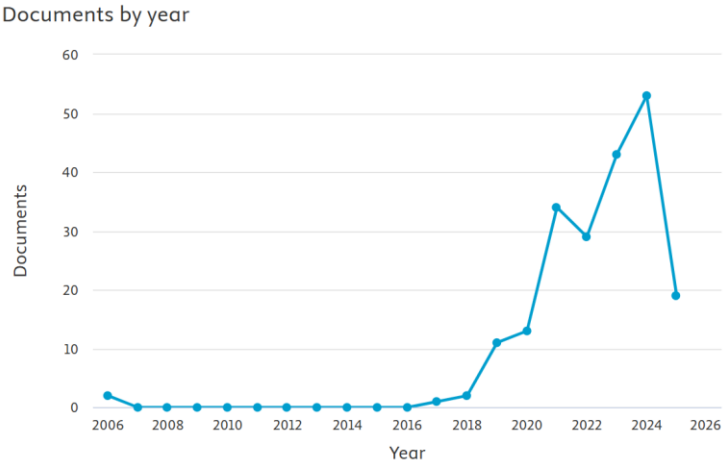
While these studies highlight different aspects of digital transformation, most are case-based or context-specific, focusing on individual technologies, companies, or countries. Few provide a holistic view of how digitalization as a broader phenomenon is shaping the evolution of financial accounting practices. Moreover, there is a lack of synthesis across studies to identify common patterns, theoretical underpinnings, or long-term impacts.

This gap underscores the need for a systematic literature review to map the current research landscape. By consolidating findings from Scopus-indexed publications, a more integrated understanding can emerge, one that informs both academic inquiry and practical implementation of digital technologies in financial accounting.

METHODS

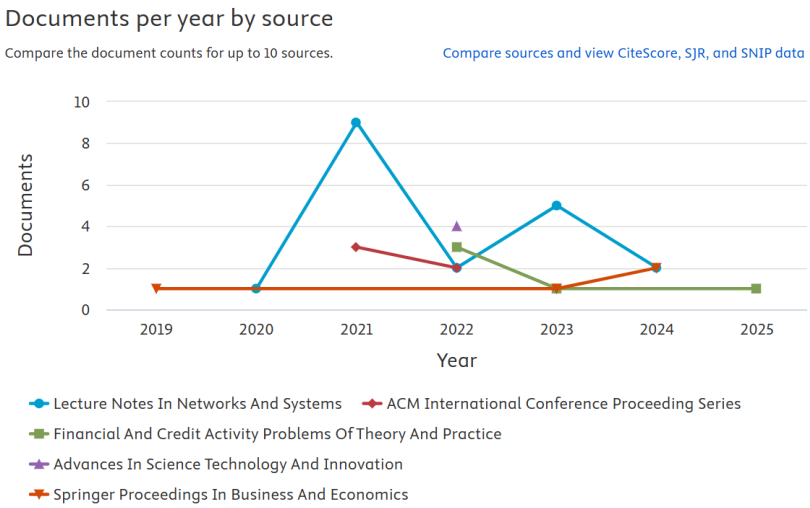
This research is qualitative research using literature study techniques. The sources of this research are studies published in Scopus-indexed journals. The research articles used in this study are studies published from 2006 to 2025. The search keywords used in searching for research articles in the Scopus database are "digitalization on financial accounting". The type of research chosen is a type of article research in English and has been finalized. Based on this method, 207 articles were obtained.

RESULTS AND DISCUSSION



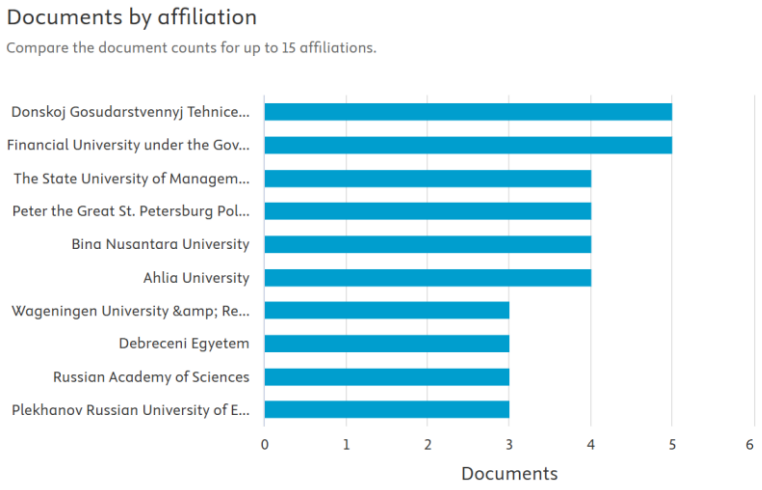
Picture 1. Documents by Year

Picture 1 illustrates the annual distribution of academic publications related to a specific topic, presumably the impact of digitalization on financial accounting, based on Scopus data from 2006 to 2025. From 2006 to 2017, the number of documents remained consistently low, mostly between 0 and 1 document per year, indicating minimal scholarly attention during this early period. However, a noticeable upward trend begins in 2018, with a slight increase to around 2–3 documents, followed by a sharp rise in 2019 and 2020, where publication counts jump to over 10 documents. This surge continues through 2021, which sees a significant spike to around 30 documents, marking a key turning point in academic interest. Although there is a minor dip in 2022, the count rebounds strongly in 2023 and peaks in 2024 with over 50 documents, reflecting the growing importance of digital transformation in financial accounting and its rising prominence in academic discourse. Interestingly, a steep decline occurs in 2025, where the document count drops back to around 20; this drop might be attributed to incomplete data collection for the current year or a temporary shift in research focus. Overall, the chart demonstrates an exponential growth in publications over the past five years, suggesting that digitalization in financial accounting has emerged as a major area of scholarly interest, especially in the post-pandemic era when digital tools became essential for remote financial operations, regulatory compliance, and automated reporting. This trend underscores the urgency for comprehensive literature reviews and theoretical development in this domain, as the academic community seeks to understand and adapt to the rapidly evolving landscape of accounting practices driven by technological innovation.



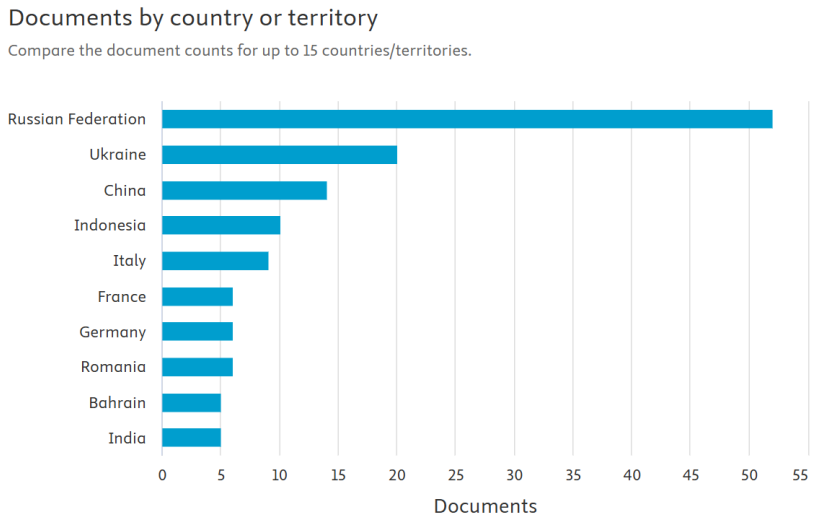
Picture 2. Documents Per Year by Source

Picture 2 displays the distribution of academic documents related to digitalization and financial accounting across five publication sources from 2019 to 2025. Among the sources, Lecture Notes in Networks and Systems stands out with a peak of 9 documents in 2021, highlighting a surge in conference or edited volume contributions during that year. This is followed by a drop to 2 documents in 2022, before rising again to 5 in 2023 and falling back to 2 in 2024, indicating fluctuating interest or publication opportunities in this source. The ACM International Conference Proceeding Series consistently produced 1 to 3 documents across the observed years, showing stable but moderate academic engagement. The Financial and Credit Activity Problems of Theory and Practice journal contributed documents more regularly from 2022 to 2025, suggesting a growing relevance of digital accounting in financial theory contexts. Advances in Science Technology and Innovation appears only in 2022, while Springer Proceedings in Business and Economics is present in 2023, both with minor contributions. Overall, the chart reflects how the topic is gaining diverse attention across both technical and business-oriented sources, with conference proceedings playing a significant role in disseminating research findings.



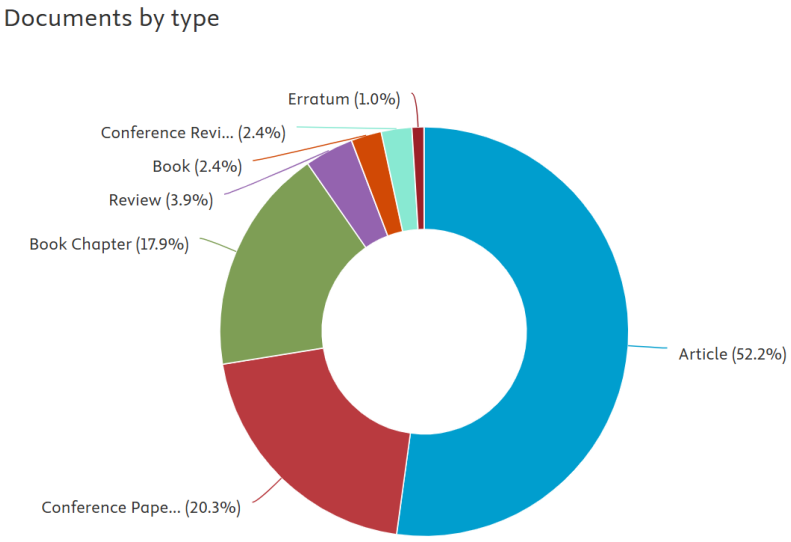
Picture 3. Documents by Affiliation

Picture 3 presents the distribution of academic publications related to digitalization and financial accounting by institutional affiliation. Among the top contributors, Donskoj Gosudarstvennyj Tekhniceskij Universitet and the Financial University under the Government of the Russian Federation lead with 5 documents each, indicating a strong research focus on this topic within these Russian institutions. Following closely, four institutions—The State University of Management, Peter the Great St. Petersburg Polytechnic University, Bina Nusantara University (Indonesia), and Ahlia University (Bahrain)—each contributed 4 documents, reflecting a geographically diverse interest in the digital transformation of accounting. Additionally, Wageningen University & Research (Netherlands), Debreceni Egyetem (Hungary), Russian Academy of Sciences, and Plekhanov Russian University of Economics each published 3 documents, suggesting emerging research activities in both Western European and Eastern institutions. This chart highlights that while Russian universities dominate the publication output, other international universities from Europe, the Middle East, and Southeast Asia are also actively engaging in the field. The global nature of the contributors underlines the universal importance of digitalization in financial accounting practices and the collaborative potential for future international studies.



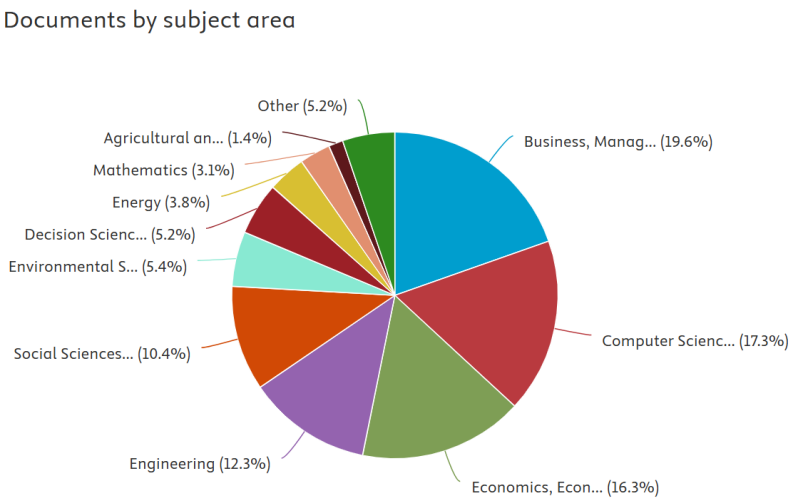
Picture 4. Documents by Country or Territory

Picture 4 illustrates the distribution of publications on digitalization and financial accounting across different nations. The Russian Federation is the most dominant contributor with over 50 documents, indicating a significant focus and research output in this area. Trailing behind is Ukraine with approximately 20 documents, followed by China with around 15, and Indonesia and Italy each contributing about 10 documents. Other countries such as France, Germany, Romania, Bahrain, and India have each published 5 to 6 documents, showing a more modest but notable engagement in this research field. The data reflects a strong Eastern European influence, particularly from Russia and Ukraine, in shaping the discourse around digitalization in accounting. Meanwhile, growing interest from Asian and European countries suggests increasing global recognition of the topic's relevance, but also highlights a geographic concentration in contributions that could benefit from broader international participation.



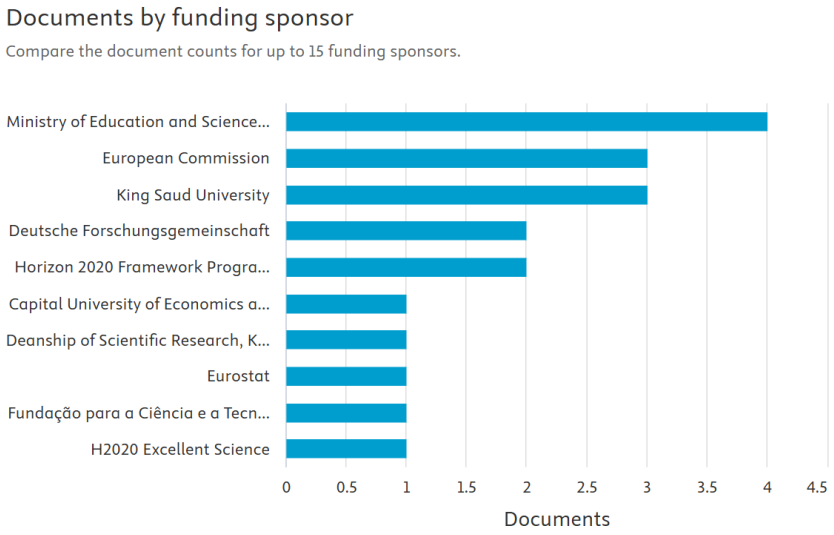
Picture 5. Documents by Type

The image 5 illustrating the distribution of various document categories within a dataset. The chart visually emphasizes that "Article" is the predominant document type, occupying the largest portion at 52.2%. "Conference Paper" represents a substantial portion at 20.3%, followed by "Book Chapter" at 17.9%. The remaining categories—"Review," "Book," "Conference Review," and "Erratum"—collectively constitute a smaller fraction of the data, with percentages ranging from 1.0% to 3.9%. This visualization suggests that articles are the most common form of documented information within this dataset, while conference papers and book chapters also contribute significantly. The remaining document types have a relatively minor presence. Overall, the chart provides a clear overview of the relative proportions of different document types, highlighting the dominance of articles.



Picture 6. Documents by Subject Area

The image 6 illustrating the distribution of documents across various subject categories. The chart reveals that "Business, Management and Accounting" is the most prominent subject area, comprising 19.6% of the documents. "Computer Science" follows at 17.3%, and "Economics, Econometrics and Finance" accounts for 16.3%. "Engineering" represents a notable portion at 12.3%, while "Social Sciences" makes up 10.4%. Several other subject areas, including "Environmental Science," "Decision Sciences," "Energy," "Mathematics," and "Agricultural and Biological Sciences," have smaller shares, ranging from 1.4% to 5.4%. The category "Other" accounts for 5.2% of the documents. Overall, the chart indicates a strong concentration of documents in business, management, accounting, computer science, and economics.



Picture 7. Documents by Funding Sponsor

The image 7 which compares the number of documents funded by various sponsors. The "Ministry of Education and Science..." is the leading sponsor, with the highest number of documents, followed closely by the "European Commission" and "King Saud University." "Deutsche Forschungsgemeinschaft" is also a significant sponsor. Several other sponsors, including "Horizon 2020 Framework Programme...," "Capital University of Economics and...," and "Deanship of Scientific Research, K...," have funded a moderate number of documents. "Eurostat," "Fundação para a Ciência e a Tecn...," and "H2020 Excellent Science" appear to have supported a smaller number of documents compared to the top sponsors. Overall, the chart provides a clear comparison of the funding output across different sponsors, highlighting the Ministry of Education and Science as the most prominent.

Discussion

Based on the series of pictures, the study explores the escalating impact of digitalization on financial accounting, as reflected in academic publications from 2006 to 2025. The research shows a distinct shift in scholarly interest around 2018, with an exponential surge in publications over the last five years. Before 2018, the number of publications was consistently low, indicating limited attention to the subject. However, the period post-2018, especially after the onset of the COVID-19 pandemic, reveals a dramatic increase in research output, peaking in 2024. This trend underscores the pivotal role of

digital transformation in reshaping financial accounting practices and its growing prominence in academic discourse.

The study also highlights the distribution of academic documents related to digitalization and financial accounting across five publication sources from 2019 to 2025. Lecture Notes in Networks and Systems had a notable peak in 2021, with nine documents, suggesting a surge in conference or edited volume contributions during that year. However, there was a subsequent drop in 2022, followed by a slight recovery in 2023 and another decline in 2024. The ACM International Conference Proceeding Series consistently produced a moderate number of documents across the observed years. In contrast, the Financial and Credit Activity Problems of Theory and Practice journal contributed documents more regularly from 2022 to 2025, indicating the increasing relevance of digital accounting in financial theory contexts. Advances in Science Technology and Innovation and Springer Proceedings in Business and Economics made minor contributions in 2022 and 2023, respectively. Overall, the findings suggest that the topic of digitalization and financial accounting is gaining traction across both technical and business-oriented sources, with conference proceedings playing a significant role in disseminating research findings.

Furthermore, the research identifies the institutions and countries that have made significant contributions to the academic discourse on digitalization and financial accounting. Donskoj Gosudarstvennyj Tekhniceskij Universitet and the Financial University under the Government of the Russian Federation are the leading institutions, with five documents each, indicating a strong research focus on this topic within Russian academia. Several other institutions, including The State University of Management, Peter the Great St. Petersburg Polytechnic University, Bina Nusantara University (Indonesia), and Ahlia University (Bahrain), have also contributed substantially to the field. In terms of countries, the Russian Federation is the most dominant, with over 50 documents, followed by Ukraine, China, Indonesia, and Italy. This highlights a strong Eastern European influence in shaping the discourse, although growing interest from Asian and other European countries is also evident.

The study also provides insights into the types of documents published and the subject areas they fall under. Articles are the predominant document type, comprising 52.2% of the publications, followed by conference papers (20.3%) and book chapters (17.9%). In terms of subject areas, most documents are categorized under "Business, Management and Accounting" (19.6%), "Computer Science" (17.3%), and "Economics, Econometrics and Finance" (16.3%). These findings suggest that the research on digitalization and financial accounting is interdisciplinary, drawing from various fields such as business, computer science, and economics.

Moreover, the study identifies the funding sponsors that have supported research on digitalization and financial accounting. The Ministry of Education and Science is the leading sponsor, followed by the European Commission and King Saud University. This indicates that funding for research on this topic comes from a variety of sources, including government agencies, international organizations, and universities.

In conclusion, the study reveals that digitalization in financial accounting has emerged as a major area of scholarly interest, particularly in the post-pandemic era. The research output has increased significantly in recent years, with contributions from various institutions, countries, and subject areas. The findings highlight the interdisciplinary

nature of the research and the importance of funding support from various sources. As digital transformation continues to reshape financial accounting practices, further research is needed to understand and adapt to the evolving landscape.

Implications of the Study

The study's implications indicate that the academic and professional worlds are increasingly recognizing the importance of digitalization in financial accounting. The surge in publications, especially post-2018, suggests that the integration of digital technologies into accounting practices is not just a trend but a fundamental shift. This heightened interest reflects the necessity for updated accounting theories, practices, and educational curricula to incorporate digital tools and concepts. The dominance of articles and conference papers highlights that current research is actively exploring and disseminating new knowledge in this evolving field. Moreover, the global distribution of contributing institutions and countries underscores the worldwide relevance of this topic, signaling that digitalization's impact on financial accounting transcends regional boundaries. Finally, the significant funding from various sponsors indicates that investing in this area is considered crucial for future economic and academic advancements.

Recommendations

Based on the study's findings, several recommendations can be made. Firstly, accounting curricula at all levels should be updated to include comprehensive training in digital accounting tools and techniques. Secondly, academic institutions should foster interdisciplinary research collaborations between accounting, computer science, and other relevant departments to develop innovative solutions for the challenges and opportunities presented by digitalization. Thirdly, professional accounting bodies should offer continuous education programs to help practitioners adapt to the changing landscape. Additionally, funding agencies should continue to support research initiatives that explore the impact of digitalization on financial accounting, with a focus on developing practical applications and addressing ethical considerations. Finally, international collaborations should be encouraged to promote the exchange of knowledge and best practices in this rapidly evolving field.

Conclusion

In conclusion, the study reveals a significant and accelerating trend in academic research focused on the impact of digitalization on financial accounting. The analysis of Scopus data from 2006 to 2025 demonstrates that while initial scholarly attention to this topic was limited, a pronounced shift occurred around 2018, leading to an exponential increase in publications. This surge underscores the growing recognition of digitalization's transformative power in reshaping financial accounting practices. Notably, the COVID-19 pandemic appears to have further catalyzed this trend, highlighting the critical role of digital tools in enabling remote financial operations, ensuring regulatory compliance, and automating reporting processes.

The research also identifies key institutions and countries contributing to this discourse, with a strong Eastern European presence, particularly from Russia, alongside increasing engagement from Asian and other European nations. The publications are predominantly articles, spanning across the fields of business, management, accounting, computer science, and economics, reflecting the interdisciplinary nature of this subject.

Funding for this research comes from diverse sources, including government bodies, international organizations, and universities, further emphasizing the global importance of this topic. Overall, the study concludes that the integration of digital technologies into financial accounting is a dynamic and rapidly expanding field of academic inquiry, with significant implications for both theory and practice.

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Figure

Figure title is numbered and written at the bottom of the figure with the bold letters and centered, accompanied by the source (if any).

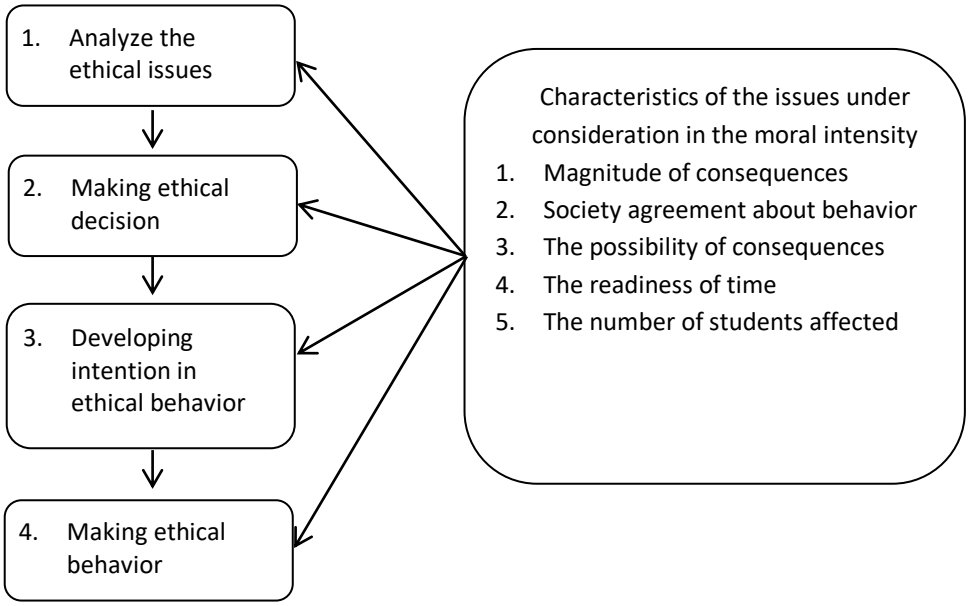

Figure 1. Ethical Decision Making Process
Source : Jones (1991) and Cohen and Bennie (2006)

Graphic

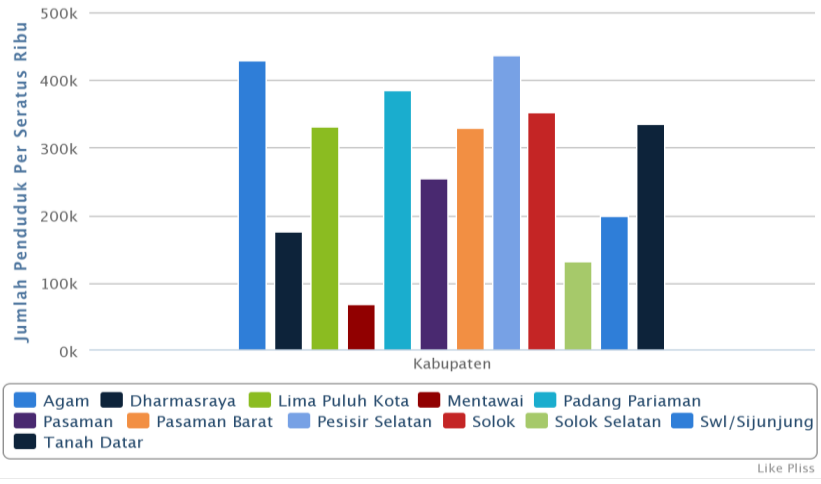

Figure 1. Population of West Sumatra by District in 2007
Source : www.bps.go.id