

DIGITAL TECHNOLOGY AND SUSTAINABLE CORPORATE REPORTING AND DISCLOSURE PRACTICES: A BIBLIOMETRIC REVIEW

Hassan Aldboush ^{*}, Abdulhadi Ibrahim ^{**},
Nashat Ali Almasria ^{***}, Hisham Al Ghunaimi ^{**}

^{*} Department of Banking and Finance, Faculty of Business, Al-Balqa Applied University, Es-Salt, Jordan

^{**} College of Business Administration, A'Sharqiyah University, Ibra, Oman

^{***} *Corresponding author*, College of Business Administration, A'Sharqiyah University, Ibra, Oman

Contact details: College of Business Administration, A'Sharqiyah University, P. O. Box 42, 400 Ibra, Oman



Abstract

How to cite this paper: Aldboush, H., Ibrahim, A., Almasria, N. A., & Al Ghunaimi, H. (2026). Digital technology and sustainable corporate reporting and disclosure practices: A bibliometric review. *Corporate Governance and Sustainability Review*, 10(3), 20–39.
<https://doi.org/10.22495/cgsrv10i3p2>

Copyright © 2026 The Authors

This work is licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0).
<https://creativecommons.org/licenses/by/4.0/>

ISSN Online: 2519-898X

ISSN Print: 2519-8971

Received: 07.11.2025

Revised: 13.12.2025; 05.01.2026; 24.03.2026

Accepted: 13.04.2026

JEL Classification: G34, M14, M41, O33, Q56

DOI: 10.22495/cgsrv10i3p2

This study presents a bibliometric analysis of the evolving research landscape at the intersection of digital technology, corporate reporting, and disclosure practices. Analysing data from Web of Science, Scopus, and Dimensions (2015–2024), this study maps the intellectual structure of the field through citation, co-citation, and co-authorship networks, as well as keyword co-occurrence. Our findings reveal a significant academic shift toward digital themes, yet a persistent dominance of traditional domains such as financial reporting and governance. Notably, critical areas such as digital transformation, data analytics, risk management, and stakeholder engagement remain markedly underrepresented. This disconnect suggests a misalignment between scholarly focus and the practical challenges corporations face. The key implication of this work is that a significant realignment of research priorities is urgently needed to address critical practical challenges and ensure the relevance of academic output in the digital age. This study provides a comprehensive map of the field's evolution and issues an urgent call for research to bridge the identified gap. The objective of this future work must be to transform corporate disclosures, making them resilient, technologically advanced (e.g., via interactive dashboards and blockchain audit trails), and directly responsive to a diverse array of stakeholders.

Keywords: Corporate Reporting, Disclosure Practices, Blockchain, Sustainability Management, Digital Technology, Environmental, Social, and Governance

Authors' individual contribution: Conceptualization—H.A., Validation—H.A.G.; Resources—A.I.; Writing—Original & Draft—N.A.A.; Writing—Review & Editing—H.A.G.; Visualization—N.A.A.; Supervision—H.A.

Declaration of conflicting interests: The Authors declare that there is no conflict of interest.

1. INTRODUCTION

Corporate reporting and disclosure practices have evolved significantly due to the advancements in transparency, accountability, and sustainability management (Awuah et al., 2024). Traditional reporting focuses on financial statements but now

includes non-financial data such as environmental, social, and governance (ESG) metrics (Stolowy & Paugam, 2018). However, information and communication technology have revolutionised how organisations generate, process, and disseminate information, leading to a paradigm shift in corporate reporting (Muratovski, 2015). Innovations such as

blockchain, artificial intelligence (AI), big data, and cloud computing have transformed traditional reporting into an interactive system that enables effective monitoring and reporting at any time and place (Gill et al., 2019). Moreover, digital technology plays a crucial role in communication during and after corporate reporting, enhancing the efficiency and effectiveness of these processes (Khin & Ho, 2019). Information and communication technology (ICT) has significantly impacted corporate reporting, with advancements such as blockchain, AI, big data, and cloud computing enhancing real-time reporting systems. However, in one study, data from 174 European companies identified 465 key audit matters (KAMs), highlighting the pandemic's increased impact on financial audit planning and risk assessment, particularly in finance, insurance, and real estate (Crucean & Hategan, 2023). These technologies enhance the quality and availability of corporate disclosures, enabling direct access to performance from anywhere. They also improve communication processes, stakeholder engagement, and organisational visibility. However, digital platforms present challenges such as data privacy, security, and potential data abuse. Good practices in data protection and ethical frameworks are crucial, as digital platforms may contribute to technological and financial inequality, as not all stakeholders have the necessary access or knowledge (Fukuda-Parr & Gibbons, 2021). Synthesising results from empirical studies and technical reviews, these reviews provide an extended summary of existing tools and their functionality, as well as comparative performance across different work environments. Such reviews are significant for detecting technological developments, best practices, and implications for existing implementations. Moreover, reviews offer a theoretical and practical basis for further research and evidence-based decision support for the adoption and integration of digital tools in corporate settings. Therefore, the purpose of this study is to examine the role of digital technologies, including AI, blockchain, and big data analytics, in transforming corporate reporting practices. The study intends to explore the effectiveness of these improvements in corporate reporting, inclusive of transparency, stakeholder dialogue, and sustainable governance, by answering the following research questions:

RQ1: Does the integration of digital technologies (AI, blockchain, big data) into corporate reporting significantly improve the transparency and efficiency of financial disclosures?

RQ2: What is the use of digital tools in corporate reporting that enhances corporate governance and increases stakeholder trust and engagement?

RQ3: What is digital transformation in corporate reporting, and has it not been fully explored in the context of ESG disclosures and sustainability reporting?

RQ4: What are the applications of AI, blockchain, and big data analytics in corporate reporting that lead to more accurate and timely financial information, which positively impact decision-making?

The remainder of this paper proceeds as follows. Section 2 reviews related literature.

Section 3 describes research methodology. Section 4 presents empirical results. Section 5 presents the discussion. Section 6 concludes the paper.

2. LITERATURE REVIEW

2.1. Background of corporate reporting processes and disclosure practices

Business reporting and disclosure are crucial in today's business management and corporate governance. They set standards for information flow, enhance financial performance, and align with commitments to sustainable development and corporate social responsibility (CSR) (Abugre & Nyuur, 2015; Alduais, Almasria, & Airout, 2022). Comprehensive reporting is essential given heightened ethical scrutiny from regulatory authorities and the public. Transparency is essential for building stakeholders' confidence and improving decision-making (Aldboush et al., 2023). By focusing on operational health and governance, companies gain support from investors and regulators, thereby strengthening their market position (Abugre & Nyuur, 2015).

As CSR increasingly influences market dynamics, effective disclosure practices become even more essential (Alduais, Almasria, et al., 2022). CSR reporting enhances corporate transparency and reputation while offering vital insights for stakeholders to make informed investment decisions. Research highlights societal expectations that businesses foster socioeconomic justice and engage with a broader spectrum of stakeholders (Al-Okaily, 2023; Aldboush et al., 2024). By disclosing CSR activities, companies can diminish information asymmetry and reinforce the credibility of their corporate reporting. The interplay between corporate governance and CSR disclosure further highlights the importance of strong governance structures in shaping disclosure practices, ultimately promoting responsible and sustainable business operations (Miniaoui et al., 2022).

This shift in reporting focus has been accompanied by advances in digital technology (Aleqab et al., 2025), which have introduced new tools for collecting, processing, and disseminating corporate data (Almasria et al., 2025). While early literature in corporate reporting primarily focused on compliance with financial reporting standards, recent studies have explored how technologies such as AI, blockchain, and big data analytics are reshaping disclosure practices (Alnsour et al., 2024). Moreover, these technologies enhance the efficiency and accuracy of reporting and improve accessibility and transparency, which are critical in an era of increased investor scrutiny and regulatory demands (M. Al-Okaily et al., 2022).

2.2. The role of digital technology in corporate reporting

The integration of digital technology in corporate reporting has been a revolutionary step. Automation, for instance, has dramatically reduced the paperwork involved in financial data collection and reporting by minimising errors and ensuring that information is presented promptly (Alles

et al., 2021). Blockchain technology enhances corporate finance teams' strategic decision-making and the reliability of financial data by enabling more efficient data entry. In a decentralised blockchain approach, once data is recorded, no party can change it without consent from other team members, thereby contributing to a new era of transparency in corporate disclosures.

Similarly, AI has catalysed improvements in corporate reporting practice. Real-time financial reporting is now possible with the advent of AI-driven algorithms processing large volumes of financial and non-financial data (A. Al-Okaily et al., 2023). Companies can more accurately predict financial outcomes through AI-powered predictive analytics, which can also benefit their decision-making and risk management.

Recent studies demonstrate that the acceptance of digital and AI-driven accounting systems depends strongly on user readiness, perceived usefulness, and the educational infrastructure surrounding such technologies (Al-Hattami et al., 2023). This emphasizes that successful adoption in corporate environments must mirror the digital learning acceptance patterns observed in higher education. Another crucial development is cloud computing in corporate reporting systems (Al-Htaybat & von Alberti-Alhtaybat, 2017). Cloud-based solutions enable the organisation to collaborate on reports in real time, thereby significantly improving reporting efficiency. Additionally, such systems are flexible and scalable, enabling companies to scale their reporting systems up or down as their business grows. Moreover, cloud computing supports the integration of big data analytics, enabling organisations to derive insights from vast amounts of data and uncover trends and relationships that would otherwise remain hidden (Sunyaev & Sunyaev, 2020).

2.3. Evolution of corporate reporting: From financial to integrated and environmental, social, and governance reporting

Traditionally, corporate reporting focused on financial disclosures aimed at shareholders and regulatory bodies. However, over the last two decades, integrated reporting has emerged as a new paradigm that integrates financial and non-financial information in a single report. A holistic view of a company's performance demonstrates how

financial performance is integrated with sustainability and governance practices. Moreover, it has been observed that integrated reporting addresses the broader paradigm shift toward sustainability by increasingly reflecting the role of non-financial metrics in corporate assessments (A. Al-Okaily et al., 2023).

In the past decade, such firms have been motivated by transparency and sustainability to report more about environmental and social effects. Most studies have shown that companies with strong ESG disclosures attract more investment and command higher market valuations (Giese et al., 2019). For instance, Sun et al. (2025) highlighted that digital transformation helps mitigate ESG greenwashing by prompting firms to innovate in green technologies, provide clearer information, and use trade credit more effectively. This effect is even more substantial when investors pay attention, and it is most pronounced in larger firms, in competitive industries, and in regions with stronger legal protections. Consequently, current standard-setting authorities and international frameworks, such as the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB), have highlighted how companies should approach ESG reporting (Ali et al., 2023). Based on the literature search, a few companies that have employed digital technology in their corporate reporting processes and disclosure practices are represented in Table 1.

However, with the new integrated ESG reporting, additional issues arise in ensuring the accuracy, consistency, and comparability of the disclosed information (Cort & Esty, 2020). This is where other technologies like blockchain, AI, and big data analytics have been most helpful. These technologies help firms gather and analyse ESG data and guarantee that the disclosed information is timely, relevant, and proper (Macpherson et al., 2021). Similarly, FinTech integration and mobile payment technologies have been identified as transformative enablers in enhancing transparency and accountability in business ecosystems, supporting the broader transition toward cashless, traceable, and auditable transactions (Al Ghunaimi et al., 2025). For example, in a firm's supply chain, blockchain can help record the origin of inputs, thereby helping to ascertain the company's sustainability and environmental and social responsibilities (Al-Kasasbeh et al., 2025).

Table 1. The use of digital technologies in corporate reporting processes and disclosure practices across leading companies

<i>Company name</i>	<i>Digital technology used</i>	<i>Purpose of technology</i>	<i>Benefits achieved</i>	<i>Disclosure practices</i>
Microsoft	AI and machine learning	Automating reporting and predictive analytics for financial disclosures	Faster reporting, enhanced accuracy, and predictive insights	Real-time financial reporting through digital platforms
Siemens	Blockchain	Securing financial data and improving transparency in supply chain reporting	Improved transparency, reduced fraud, and enhanced trust	Blockchain-based transparency in sustainability reporting
Walmart	Data analytics and business intelligence (BI) tools	Analysing large datasets for financial and operational performance reporting	Enhanced decision-making, reduced errors, and improved financial accuracy	Frequent, detailed operational performance reports
General Electric (GE)	Cloud computing and enterprise resource planning (ERP) systems	Centralising global financial reporting and integrating financial systems	Streamlined reporting cycles, reduced costs, and improved compliance	Cloud-based integrated financial statements and disclosures
IBM	AI-based risk management tools	Identifying financial risks and improving risk-related disclosures	Improved risk evaluation, more detailed risk reporting	AI-enhanced risk disclosures in annual reports
Unilever	Sustainability reporting software	Tracking and reporting on ESG metrics	Improved sustainability reporting accuracy and compliance with ESG standards	Detailed ESG reports integrated with financial disclosures.
Tesla	Internet of Things (IoT) and smart data collection	Capturing real-time production data for financial forecasting and reporting	Real-time insights into production, enhanced forecasting	Real-time production and financial updates
Amazon	Cloud-based accounting systems	Automating financial processes and enhancing transparency in reports	Faster financial close cycles, improved accuracy	Cloud-based, transparent financial disclosures
BP	AI for carbon reporting	Monitoring and reporting on carbon emissions and energy consumption	Improved environmental reporting, enhanced compliance	Detailed carbon footprint disclosures integrated with sustainability reports
Deloitte	Blockchain and AI for auditing	Automating and improving the accuracy of financial audits and reporting	Reduced audit inaccuracies and faster audit cycles	Enhanced audit disclosures with blockchain transparency

2.4. Mechanisms linking digital technology to corporate reporting

Digital technologies are transforming corporate reporting by changing how information is created, standardised, and distributed. Automated capture, cleaning, and integration of financial and non-financial information are enabled through AI, the IoT, and big data analytics. This technological shift improves the completeness, timeliness, and comparability of disclosures, thereby enabling stronger stakeholder engagement and decision usefulness (Al-Hattami et al., 2023). Reporting infrastructure is further reinforced by standardisation mechanisms, including the International Financial Reporting Standards (IFRS) taxonomy and the eXtensible Business Reporting Language (XBRL), which codify accounting concepts into machine-readable formats, minimising interpretive differences and enhancing comparability across firms and jurisdictions (Troshani et al., 2018). Advanced analytics, such as machine learning algorithms and predictive modelling, further enhance the analytical power of reporting by identifying anomalies, predicting risks, and generating future-oriented insights, thereby enabling users to better assess value creation, risk, and ESG performance (Ibrahim et al., 2025). Cloud-based enterprise systems and digital accounting platforms integrate financial, operational, and sustainability data, reducing reporting lags and

enabling near real-time disclosure cycles aligned with dynamic market expectations. Beyond efficiency and timeliness, digital technologies are redefining the credibility and governance role of corporate reporting. Blockchain and other integrity-preserving technologies establish verifiable audit trails and immutable records, strengthening assurance practices and reducing manipulation risks in both financial and ESG reports. Digitalisation is also transforming audit practice, as advanced analytics, process mining, and automation increase audit evidence, improve anomaly detection, and enhance monitoring capacity, thereby restricting managerial discretion, strengthening board oversight, and improving disclosure of sensitive matters such as compensation and risk. Stakeholder communication has similarly evolved through interactive dashboards and digital platforms that provide more accessible and traceable disclosures. While these innovations enhance accountability for ethical, social, and environmental performance, they also raise challenges related to data privacy, protection, and regulatory oversight. Despite the growing literature on integrated and ESG reporting, challenges related to the accuracy and comparability of disclosed information persist. This study aims to address these challenges by exploring the evolution of research on digital technologies in corporate reporting. By employing bibliometric analysis, the research will map trends, identify influential studies, and highlight gaps in

the literature. This approach will contribute to a deeper understanding of how digital innovations are reshaping corporate disclosure practices and their implications for stakeholder trust and market dynamics (Zupic & Čater, 2015). Research has explored technology adoption in less-developed countries from multiple angles, ranging from its impact on internal decision-making to the external factors influencing e-commerce purchase intention (Al-Hattami et al., 2023).

3. METHODOLOGY

This research uses two phases in its approach that include a systematic literature review for data collection from selected datasets, supported by bibliometric analysis of the chosen dataset to investigate and analyse the research area on 'corporate reporting' and 'digital technologies', identifying the trends and growth of knowledge and future potentialities in this promising research area. The study employs a qualitative method, focusing on articles published in international academic journals and preprints in the field from 2015 to 2024 on technological advancements in digital technology, corporate reporting, and disclosure practices. This research method was used to determine emerging trends in technological development for corporate reporting. This approach enables a practical evaluation of how various tools and technologies, including modern technology, impacted corporate disclosure practices.

3.1. Selection criteria

This study included peer-reviewed articles, reviews, and preprints published between 2015 and 2024 in English, focusing on how digital technologies impact corporate reporting and disclosure practices. Only articles from trusted databases like Web of Science, Scopus, and Dimensions were considered. Studies not directly related to the topic, non-peer-reviewed content, or articles in languages other than English were excluded. Articles without full-text access or that did not fit the research focus were also excluded. These criteria ensure the study includes only relevant and high-quality sources.

3.2. Data collection

Using the search terms 'Digital technology', 'corporate reporting', and 'disclosure practices', data were retrieved from Web of Science, Scopus, and Dimensions for this study. The keywords in this study were searched using the Web of Science, Scopus, and Dimensions, which were selected for their excellent coverage of publications in the academic field and the largest number of repositories from 1900 to the present. These databases were selected for their comprehensive coverage of academic publications, providing a substantial number of articles from 1900 to

the present, and their inclusion of essential bibliographic data necessary for analysis (Creswell & Creswell, 2017). This study focuses on digital technology, corporate reporting, and disclosure practices for the academic period 2015–2024. The search terms are limited to contemporary issues in digital corporate reporting, and the field is limited to 'themes' and English-written scientific articles published in accounting, business, finance, and economics journals. The data is arranged chronologically.

1. Emerald database: Conducted a search using the query 'content-type'.

2. Moreover, (digital technology AND corporate reporting AND disclosure practices) NOT (education), which yielded 145 open-access articles.

3. EBSCOhost was searched for the keyword 'digital technology in corporate reporting' within full-text sources and academic journal types, resulting in 24 open-access articles.

4. Web of Science: Investigated 'digital technology and corporate reporting', resulting in 180 open-access articles.

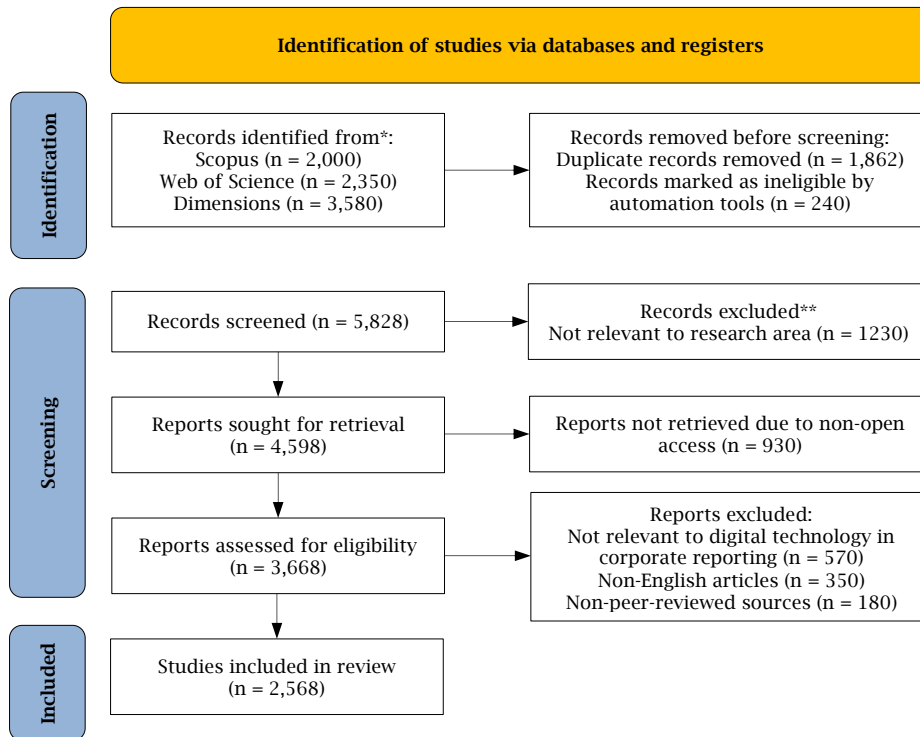
5. Scopus: Conducted a trace with TITLE-ABS-KEY ('digital AND technology AND corporate AND reporting') AND (LIMIT-TO (OA, 'all')) AND (LIMIT-TO (LANGUAGE, 'English')), yielding 100 open-access articles.

6. Dimensions: Searched using the terms 'digital technology', 'corporate reporting processes', and 'disclosure practices' refined by 'journals' and 'preprints' within the subject areas of 'business, management, and accounting', and article types 'review and research articles', focusing on publications such as 'Sustainability', 'SSRN Electronic Journal', 'arXiv', 'Journal of Business Research', 'Business Strategy and the Environment', 'Journal of Corporate Finance', and others which resulted in 22,288 articles.

7. This qualitative analysis aligns with previous research methodologies, as demonstrated by studies such as Gandasari et al. (2024) and Murdayanti and Khan (2021), which also utilised qualitative content analysis to examine trends in digital reporting (Gandasari et al., 2024; Murdayanti & Khan, 2021).

This study analysed peer-reviewed academic articles and preprints published between 2015 and 2024 on digital technology, corporate reporting, and disclosure practices. The articles were sourced from reputable English-language databases and were published in accounting, business, finance, and economics, with a focus on research articles. The databases included in the study were selected for their ability to provide comprehensive coverage of scholarly articles that adequately capture the broader discussions of digital technology and corporate reporting. This study adopts the data collection methods used in previous studies, such as Gandasari et al. (2024) and Murdayanti and Khan (2021), which also employed content analysis to analyse trends in corporate reporting (Figure 1).

Figure 1. PRISMA flow diagram



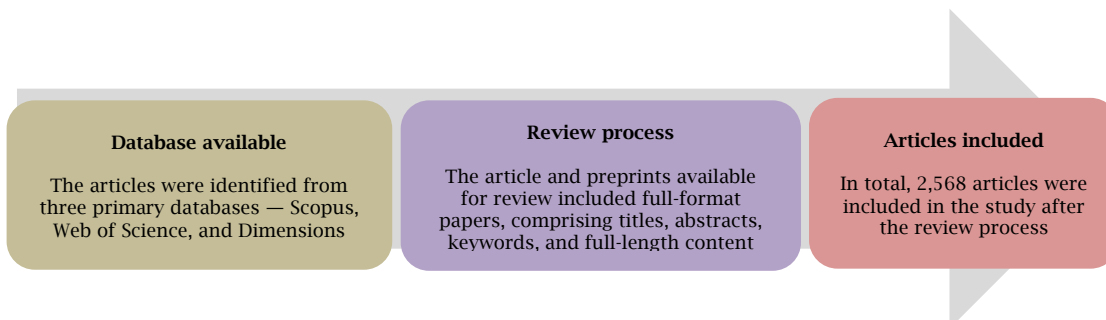
Source: Authors' elaboration.

3.3. Data analysis

VOSviewer, a Java-based analytical tool, was used in this study to visualise and analyse trends in the scientific literature, with a focus on network visualisation and automatic cluster labelling (Arruda et al., 2022). VOSviewer is a software tool for creating and visualising bibliometric maps, available for free at <https://www.vosviewer.com/>. It comprises various visual-analytic and functional components that enhance the interpretation of the represented knowledge domain. The software facilitates the identification of intellectual foundations, emerging trends, and knowledge networks by analysing authors, keywords, institutions, and cited references across academic articles (van Eck & Waltman, 2017). The VOSviewer application not only provides visual analytics but also integrates quantitative metrics with qualitative insights, allowing for a deeper understanding of research developments and key topics within

the field. The data, exported in comma-separated values (CSV) format, was processed using VOSviewer to generate bibliometric maps on digital technology, corporate reporting, and disclosure practices. To obtain a map of research developments, the data is exported as a CSV file. The exported data is then processed and analysed using the VOSviewer application to generate a bibliometric map of research development in the fields of digital technology, corporate reporting processes, and disclosure practices. This bibliometric technique provides valuable insights into research developments, offering a quantitative approach that reveals influential authors, key topics, and emerging research areas within the field, and is particularly useful compared with traditional qualitative analysis methods. In other words, bibliometrics is a mathematical and statistical tool for studying books and other types of communication (Lam et al., 2022). The methodology of this study is summarised in Figure 2.

Figure 2. Process of collecting data from internet financial reporting publications



Source: Authors' elaboration.

3.4. Bias mitigation and review process

To address potential biases, this study relies on a rigorous systematic literature review process, which involves a comprehensive and transparent selection of studies. A team of reviewers independently screened and assessed the articles based on predefined inclusion and exclusion criteria, ensuring consistency and minimising subjective judgment. Discrepancies between reviewers were resolved through discussion, and the final selection of studies was based on mutual agreement.

4. RESULTS

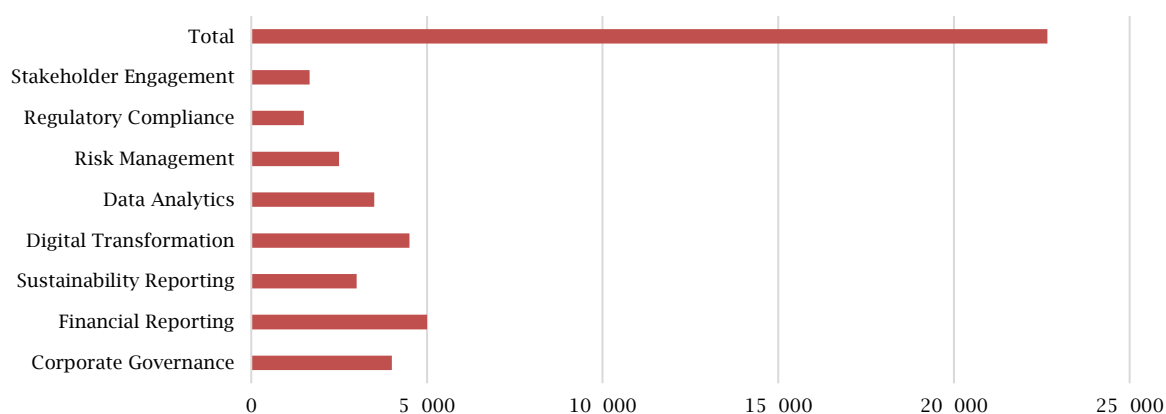
4.1. Analysis of included studies

Figure 3 on corporate reporting processes primarily focuses on financial reporting and corporate governance, with over 23,000 articles published. Emerging fields such as digital transformation and data analytics are underrepresented in the academic literature, highlighting a gap and a need for further

research on how digital technologies transform corporate reporting practices.

Previous studies have emphasized the importance of aligning digital transformation with corporate governance, yet this area remains relatively understudied. According to Ziniuk et al. (2022), aligning digital transformation with corporate governance is important due to the specific features and characteristics of corporate governance in the context of digital transformation, as well as the advantages and disadvantages of digitalisation (Ziniuk et al., 2022). However, aligning digital transformation with corporate governance can improve corporate performance; however, the positive effect becomes weaker as the level of corporate governance increases (Li et al., 2024). According to Meng et al. (2022), digital transformation increases corporate social performance more pronouncedly when firms have higher proportions of independent directors on the board and institutional owners, while stakeholders strategically influence each other's interpretations of the digital transformation process through frame transformation mechanisms (Mergel et al., 2019).

Figure 3. Included articles domains

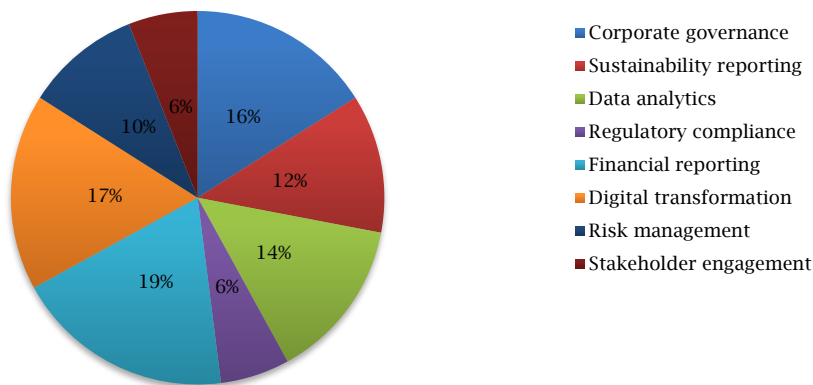


Source: Authors' elaboration.

The pie chart in Figure 4 shows that the literature primarily focuses on financial reporting and corporate governance, with sustainability reporting and data analytics being the most important. However, there is insufficient coverage of risk management and stakeholder engagement, both of which are crucial to corporate transparency and accountability. The underrepresentation of digital transformation suggests a need for further research into how digital tools can enhance risk management within corporate reporting frameworks. However, recent research proves that digital technologies are having a substantial impact in these directions. AI can facilitate disclosures, make them faster and more reliable, and use structured languages, including XBRL, to lessen information asymmetry and improve

comparability (Al-Okaily, 2025). Machine learning and text analytics can be used in risk reporting to identify minute risks early and enable more uniform disclosure, thereby overcoming cross-country differences reported in previous crises (Arena et al., 2015). New methods, such as neural network models of corporate filings, also show how the variety and strength of risk disclosures inform investor perceptions. In the context of sustainability and ESG reporting, blockchain-driven verification solutions enhance the quality of environmental reporting and reduce greenwashing (Sun et al., 2025). Overall, these results emphasise that digital transformation can improve efficiency and transparency and extend the scope of corporate reporting to encompass financial, non-financial, and stakeholder-focused aspects.

Figure 4. Percent of each domain



Source: Authors' elaboration.

4.2. Publication trend analysis

The publication trends in the role of digital technology in corporate reporting and disclosure practices from 2015 to 2024, as shown in Figure 5, indicate a significant academic shift. Digital technologies and corporate reporting are still in their early stages, with traditional frameworks (Li, 2020). However, the gradual increase in publications in 2018 marked a turning point, as the potential of digital transformation to revolutionise corporate reporting processes was recognised. Advancements in AI, blockchain, and big data analytics have reshaped how corporations manage financial disclosures, risk management, and governance, prompting researchers to explore new avenues to enhance transparency, accuracy, and efficiency in corporate reporting (Aderemi et al., 2024).

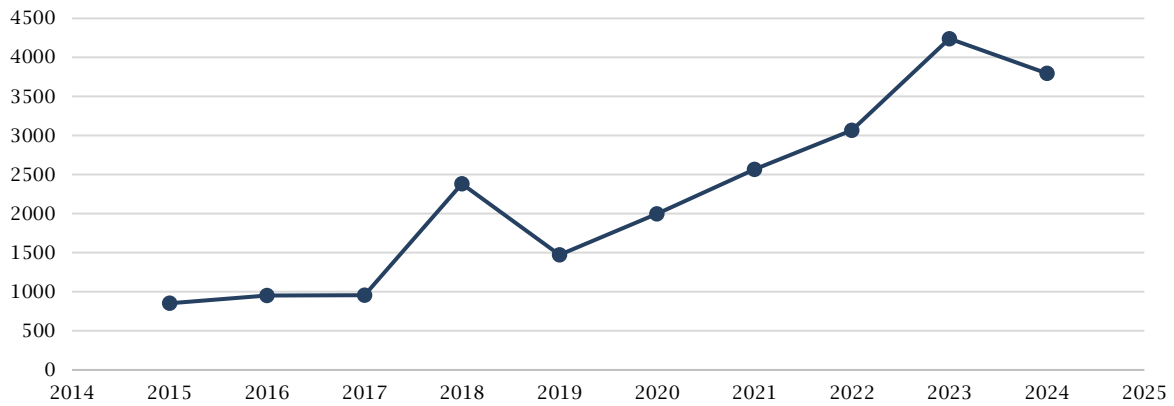
The global increase in digital initiatives was affected by the COVID-19 pandemic, which has led to a significant increase in academic output between 2020 and 2023 (Barrutia & Echebarria, 2021). Before the COVID-19 crisis, the adoption of digital technologies in corporate reporting was gradual, with firms primarily experimenting with automation, blockchain, and cloud systems to streamline disclosures and improve efficiency. The studies in the dataset suggested that digitalisation enhanced transparency and reduced reporting lags, yet most initiatives were merely scaled up rather than transformed. The onset of the pandemic accelerated this trajectory, positioning digitalisation as a critical capability for resilience (Li et al., 2022). Digital technology enabled firms to build dynamic capabilities, improving operational agility and market capitalisation strategies during the crisis.

Similarly, concerns emerged regarding the integrity of financial reporting (Hsu & Yang, 2022). They found that financial reporting quality declined in the United Kingdom (UK) during the pandemic, with greater reliance on real earnings management. However, stronger boards mitigated some of these effects. Similar concerns were raised in Bangladesh, where companies adapted disclosure practices to meet heightened expectations of legitimacy. The pandemic also highlighted the importance of non-financial reporting, with Hassan et al. (2021) urging firms to expand disclosures to biodiversity and sustainability dimensions.

Studies further indicate that small and medium-sized enterprises (SMEs) were particularly vulnerable. According to Lutfi et al. (2022), when digital accounting systems are supported by organisational readiness and government initiatives, they lead to improved performance during pandemic conditions. Other studies have also shown that COVID-19 is a "great accelerator" of digitalisation, reshaping governance, risk management, and audit practices (Amankwah-Amoah et al., 2021; Bani-Khaled & Pinho, 2024).

However, researchers are now exploring how digital tools such as cloud computing, automation, and AI can enhance corporate transparency and compliance (Prakash et al., 2024). The peak in 2023 was over 4,000 publications, highlighting growing academic interest in this field. However, a slight decline in 2024 may signal a shift toward specialised research areas such as digital sustainability reporting or stakeholder engagement. Future research is required to explore cutting-edge technologies like blockchain and AI to address emerging challenges and opportunities in corporate disclosure.

Figure 5. Publications trend analysis



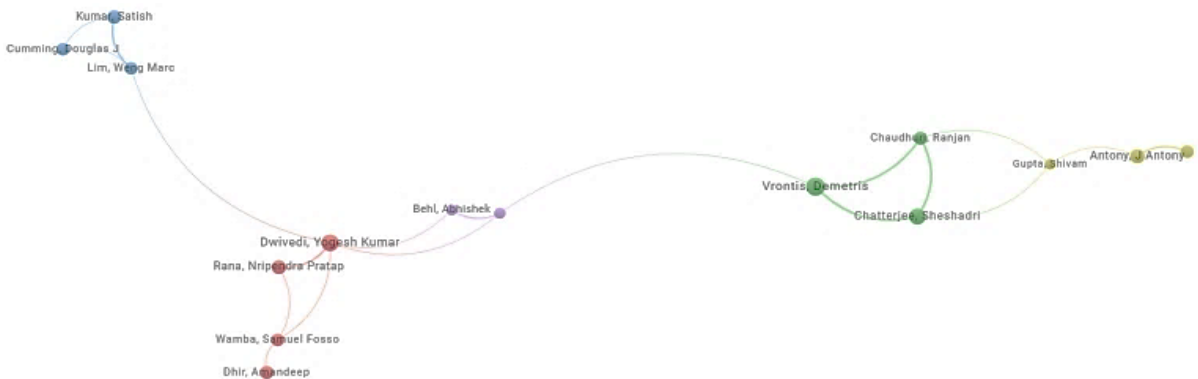
Source: Authors' elaboration.

4.3. Co-authorship analysis

The co-authorship network map constructed by VOSviewer in Figure 6 visualises the collaborative relationships between key authors in digital technology and corporate reporting. The clusters represent different groups of researchers, with each colour indicating a distinct research community. Prominent authors such as Kumar, Dwivedi, and Behl demonstrated strong connections within their respective clusters, indicating their central role in

the field. The green cluster, comprising Vrontis, Chadha, and Ranjan, has produced a highly interconnected group focused on corporate governance and digital transformation. Consequently, other clusters, such as Wamba and Lim, are more dispersed, suggesting emerging but less integrated research areas. The network highlighted the field's interdisciplinary nature and suggested the potential for further collaboration across these clusters.

Figure 6. Co-authorship analysis



Source: Authors' elaboration using VOSViewer.

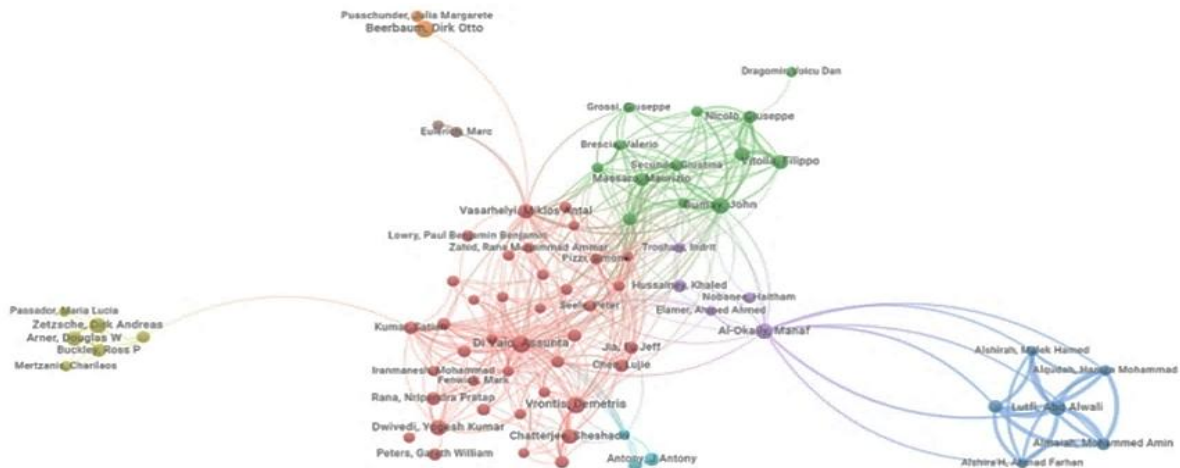
4.4. Co-citation analysis

The co-citation analysis of authors, as visualised in the VOSviewer map in Figure 7, shows that distinct clusters characterise the field of digital technology and corporate reporting. The red cluster, dominated by influential authors such as Dwivedi, Vrontis, and Kumar, is the most interconnected, underscoring their contributions to digital transformation,

corporate governance, and financial reporting practices. The green cluster, specialised in sustainability reporting and the integration of digital tools into ESG disclosures, represents an emerging area of research. The orange and purple clusters indicate isolated research areas.

Table 2 presents the top 10 most cited papers in the field of digital technology, corporate reporting processes, and disclosure practices.

Figure 7. Co-citation analysis of key authors



Source: Authors' elaboration using VOSviewer.

Table 2. Top 10 most cited papers

Title	Publication year	Access	Publication date	Citing scholarly works
The role of digital technologies in corporate reporting and transparency	2018	Open access	5-15-2018	762
The impact of AI on corporate disclosure and reporting practices	2021	Non-open access	7-20-2021	614
Digital transformation in corporate reporting: A study on the adoption of new technologies	2020	Open access	3-10-2020	532
Corporate reporting in the digital age: Challenges and opportunities	2022	Non-open access	1-12-2022	490
Blockchain technology in corporate reporting: A framework for transparency and accountability	2020	Open access	9-30-2020	465
The influence of social media on corporate disclosure practices	2019	Open access	2-14-2019	452
Big data and corporate reporting: How data analytics are transforming disclosure practices	2021	Non-open access	11-10-2021	438
Transparency and corporate governance: The role of digital technologies	2023	Open access	4-5-2023	410
E-reporting and corporate accountability: A study of emerging trends and technologies	2022	Non-open access	8-25-2022	390
The future of corporate reporting: Innovations in digital disclosure and transparency	2023	Open access	6-12-2023	375

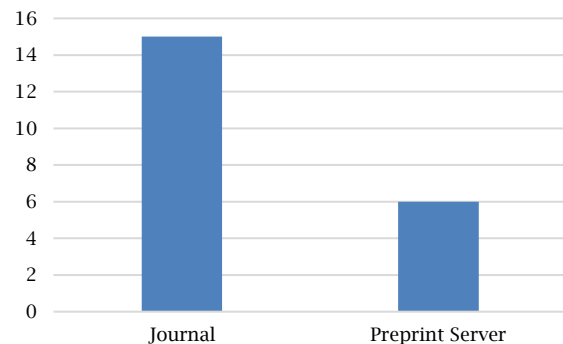
Source: Authors' elaboration.

4.5. Sources analysis (top 20 publications)

The source analysis in Figure 8 revealed that most digital technology and corporate reporting publications were derived from established academic journals, with significantly fewer papers coming from preprint servers. The analysis of the top journals by publication count in Figure 9 showed that the SSRN Electronic Journal was the leading source, contributing nearly 2,800 articles, underscoring its greater influence in the field. Other prominent journals, including Cogent Business & Management, Corporate Social Responsibility and Environmental Management, and Business Strategy and the Environment, each published 300-500 articles. These journals are well known for their focus on corporate governance, sustainability, and business strategy, reflecting the growing integration of digital technologies across these areas. The distribution pattern indicates that these journals are key

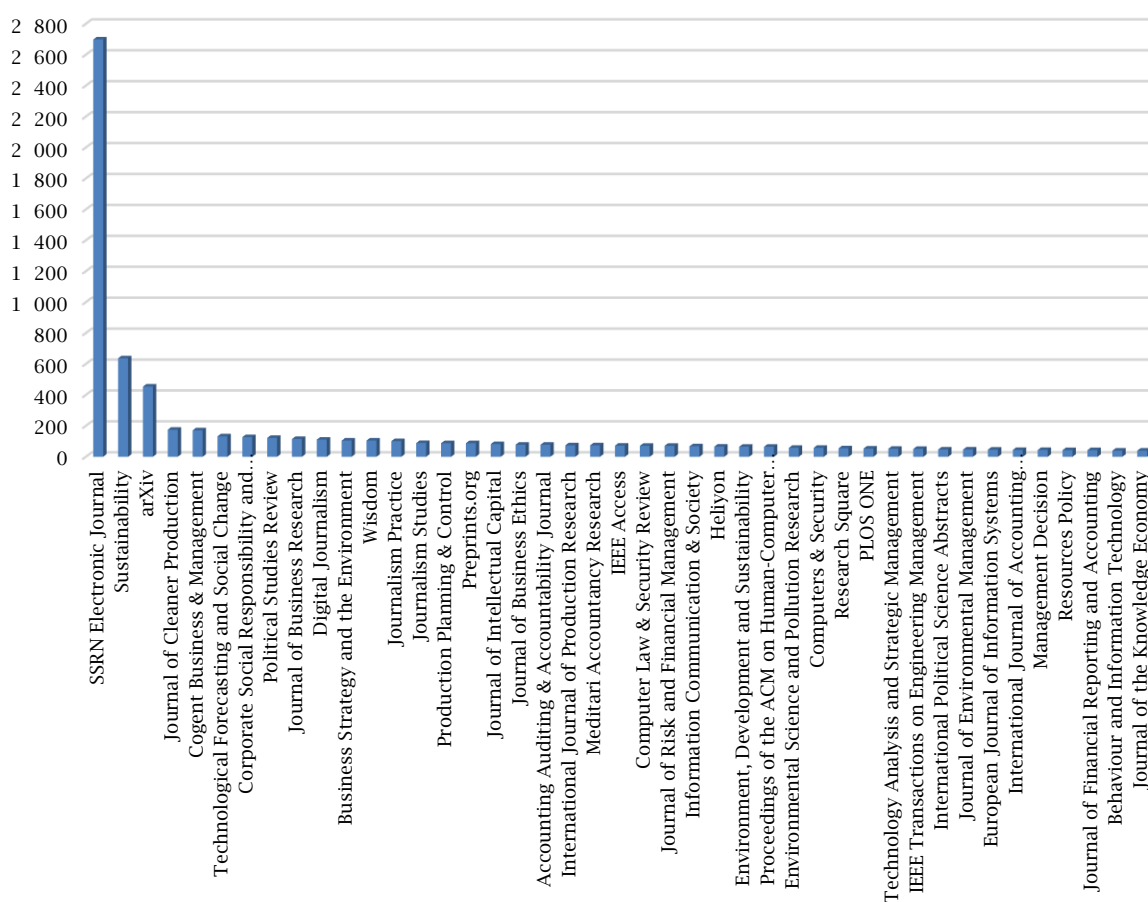
contributors to academic research, whereas preprint servers play a more minor but significant role in highlighting recent technological advances.

Figure 8. Type of publications platform



Source: Authors' elaboration.

Figure 9. Top journals in publication numbers



Source: Authors' elaboration.

Table 3. Top 20 most cited journals

Journal	Publications	Citations	Citations mean
International Journal of Information Management	27	5,559	205.89
International Journal of Production Research	74	10,080	136.22
Cochrane Database of Systematic Reviews	17	1,845	108.53
New Media & Society	18	1,673	92.94
Government Information Quarterly	29	1,888	65.10
Business & Society	19	1,274	67.05
Journal of Management Studies	16	1,005	62.81
Journal of Knowledge Management	16	957	59.81
Journal of the Academy of Marketing Science	15	894	59.60
Information Communication & Society	68	3,640	53.53
Big Data & Society	20	1,065	53.25
Journal of Emerging Technologies in Accounting	19	1,011	53.21
Accounting Auditing & Accountability Journal	78	3,585	45.96
Policy & Internet	14	636	45.43
Journal of Business Research	115	5,386	46.83
Production and Operations Management	15	716	47.73
The International Journal of Human Resource Management	25	1,210	48.40
Journal of Sustainable Tourism	22	1,005	45.68
Journal of Cleaner Production	175	7,443	42.53
Research Policy	23	950	41.30

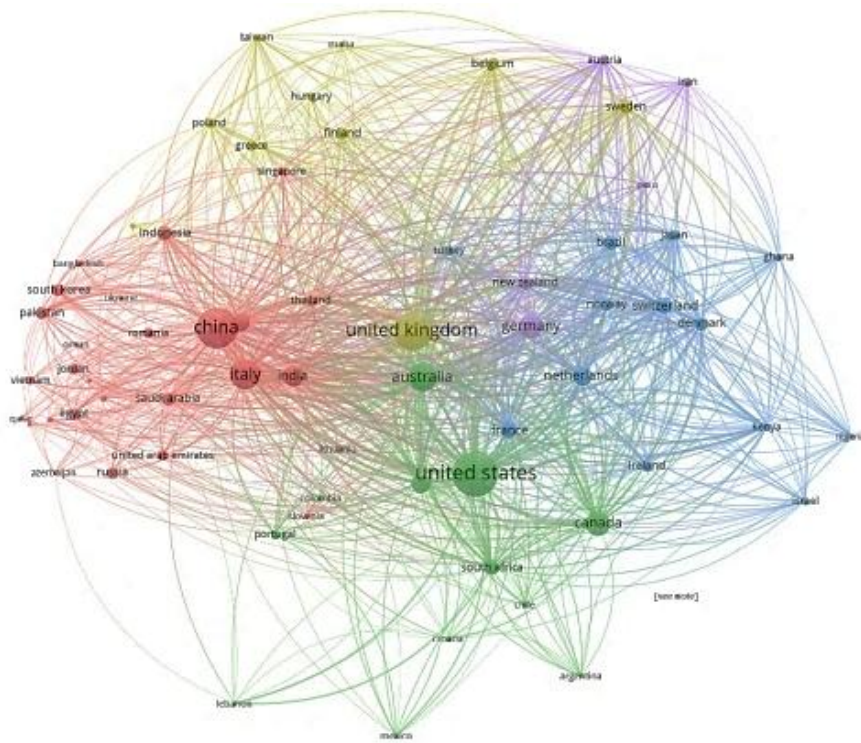
Source: Authors' elaboration.

4.6. Emerging countries analysis

The visualisation map of emerging countries in Figure 10 showed a pronounced geographic concentration of research output from several key countries. The network visualisation highlighted that the United States, the UK, and China are central contributors to the literature in this field, with the largest nodes indicating significant research

activity and strong collaborative links between these nations. Countries such as Italy, Germany, and the Netherlands also play prominent roles, forming dense clusters of co-authorship and citation patterns. The interconnectedness of these countries suggested a highly collaborative, global research effort, with notable cross-border scholarly exchanges, particularly among European nations, North America, and Asia.

Figure 10. Emerging countries visualisation map



Source: Authors' elaboration using VOSviewer.

4.7. Keywords-concurrence analysis

The keyword analysis map constructed by VOSviewer in Figure 11 revealed three distinct thematic clusters. The green cluster emphasised the importance of disclosure, paper, and company, highlighting the role of corporate governance and ESG factors. The blue cluster is centred around company, governance, and relationship, focusing on the intersection of corporate governance mechanisms and industry-specific disclosure

practices. Lastly, the red cluster is dominated by review, AI, and digital technology, indicating a strong connection between technological advancements, particularly AI, and their impact on corporate reporting processes. This visualisation highlighted the growing integration of digital tools to enhance transparency, improve disclosure practices, and address evolving stakeholder demands in corporate governance. The overall keywords represented in the visualisation map have been summarised and arranged in Table 4.

Table 4. Clusters keywords

Cluster	Keywords
Cluster 1	Company, Governance, Relationship, Stakeholder, Industry, Mechanism, Corporate Governance, Regulatory Framework, Ownership, Reporting Practice
Cluster 2	Disclosure, Paper, ESG, Sustainability, Environmental Impact, Social Responsibility, Regulation, Reporting Standard, Future Research, Transparency
Cluster 3	Digital Technology, AI, Review, Blockchain, Machine Learning, Data Analytics, Automation, Financial Technology, Innovation, Corporate Reporting

cybersecurity management have become focal areas of concern. However, these developments can complicate a network's security, creating problems for organisations. Additionally, the International Organization for Standardization (ISO) is being developed by standard-setting bodies to promote data governance and cybersecurity, with a focus on privacy-by-design, collaboration, information sharing, and user education (Kamara, 2024). The nature of sectors and businesses varies, and so do the types of regulatory standards necessary for executive functioning; for instance, the financial sector's regulation requires enhanced cybersecurity measures, whereas the creative industries' regulation requires decentralised systems rather than a heavily bureaucratic overemphasis on data privacy.

5.1. Technology and standard-setting in accounting

Digital technology significantly affects standard-setting and accounting standards by reshaping the collection, processing, and reporting of financial information. Companies are adopting AI, blockchain, and automation, replacing traditional manual processes with real-time data flows and greater processing efficiency, thereby shifting accounting practices (Jejenywa et al., 2024). These technological advancements underscore the need to update existing accounting standards to accommodate new data management, reporting, and audit-trail requirements. For instance, blockchain-based reporting raises questions regarding data privacy, security, and governance, prompting regulators to revise or develop standards to address these issues. Similarly, AI-based predictive analytics introduces challenges in ensuring that automated reporting remains free from bias and meets ethical standards (Murikah et al., 2024). However, accounting bodies and standard-setting organisations must continually evolve their frameworks to reflect the opportunities and risks posed by these digital innovations, thereby upholding transparency, accuracy, and fairness in financial disclosures (Ng, 2024). This contribution has raised a significant question: Will digital reporting influence future disclosure standards?

According to prior studies and the current study's analysis, digital reporting is expected to significantly influence future disclosure standards by making reporting processes faster, more transparent, and data-driven. As companies increasingly use digital tools for integrated reporting, including financial, sustainability, and social disclosures, standard-setters will need to develop new guidelines that reflect the capabilities and challenges of these technologies (Adelowotan, 2024). For instance, real-time reporting enabled by AI and big data analytics could require updates to standards that traditionally assumed periodic reporting cycles (Kibria et al., 2018). Moreover, as blockchain technology ensures data integrity and transparency, the need for more robust standards in data governance and cybersecurity will become critical (Kshetri, 2017). Additionally, digital reporting also facilitates more timely disclosures, which could lead to new areas around the frequency, detail, and format of corporate reports. However, the adoption of digital technologies in corporate reporting is likely to enhance existing disclosure standards, ensuring they adequately address the needs of both

companies and stakeholders in an increasingly digital-first environment (Awuah et al., 2024).

5.2. Practical implications

The results of this study highlight several key pragmatic implications for firms seeking to enhance their corporate reporting processes through currently available digital technologies. By leveraging emerging technologies such as AI, blockchain, and big data analytics, companies can enhance the transparency, accuracy, and efficiency of their financial disclosures (Han et al., 2023; Kumar et al., 2023). According to Sabour and Al-Waeli (2023), blockchain technology can enhance financial disclosure's security, transparency, and quality by controlling dirty data, enhancing security, and managing data sharing. These technologies enable real-time reporting, automate data validation, and enable businesses to deliver more credible reports more quickly (Han et al., 2023; Sharma et al., 2021). For instance, Li et al. (2022) have developed graph-learning algorithms like TA-Struc2Vec that can improve Internet financial fraud detection efficiency with better Precision, F1-score, and area under the curve (AUC). Additionally, leveraging these technologies helps firms align more effectively with the growing demand for transparency from stakeholders, investors, and regulators (Solaimani, 2024). For instance, the voluntary adoption of sustainability reporting frameworks enabled with digital tools can allow companies to reflect their reporting practices according to ESG criteria among stakeholders having a socially responsible investor mindset, improving the company's quality of its consumers (Widyawati, 2020).

Digital technology has been increasingly integrated into non-financial and sustainability reporting, transforming how companies disclose information on ESG performance. In this regard, fostering employee engagement and motivation within digitally transforming organizations is essential, as human capital remains the cornerstone of successful technology adoption and sustainable productivity (AlGhunaimi & AlGhenaimi, 2024). Tools like AI, blockchain, and big data analytics are enabling real-time reporting, enhancing transparency, and improving the accuracy of sustainability disclosures (Wu et al., 2022). These technologies help organisations align their reporting practices with frameworks such as the GRI and the SASB, thereby facilitating the tracking and verification of non-financial metrics. For instance, blockchain technology can be used to ensure the traceability and immutability of ESG-related data, thus boosting stakeholder trust in sustainability reports (Almadadha, 2024). Moreover, predictive analytics can help companies forecast the impact of their sustainability initiatives, enabling more informed decision-making (Bickley et al., 2024). The shift towards digital tools in non-financial reporting highlighted a significant trend of integrating corporate governance, sustainability, and digital transformation to meet growing stakeholder demands for transparency and accountability.

The analysis also highlighted which aspects of digital transformation are reflected in regulatory practices and governance frameworks. As technologies mature and are further incorporated

into corporate reporting processes, regulators must calibrate their frameworks to highlight the new risks and opportunities they create (Almasria et al., 2025). For instance, while blockchain-based reporting can reduce opacity by facilitating the tracing of the source of funds at each stage, it also raises governance issues related to data privacy and cybersecurity. Regulators must establish robust compliance standards that balance the innovative opportunities of digital technology with the need to protect data integrity and security. Additionally, with the increasing use of automation and AI as reporting tools by companies in direct response to this requirement, there is a need for audit standards to adapt so that these new technologies are being used ethically and that their data outputs are free from bias. As digital and integrated reporting begin to take off, companies will face additional governance challenges. A key issue will be the required level of digital literacy among boards and executive teams to adequately supervise these more sophisticated reporting systems (Hamad et al., 2020). Moreover, with increased integrated reporting across financial, sustainability, and governance dimensions, companies will likely have to redefine and more cohesively govern themselves with new internal governance architectures (Annesi et al., 2024). The change could necessitate new reporting structures, with additional safeguards to guarantee, and a commitment that all other aspects of corporate performance, such as financial, social, and environmental, should be reported with similarly rigorous standards. In addition, companies that address these governance challenges early will be better positioned to navigate the evolving corporate reporting environment (Hilton & Arkorful, 2021).

5.3. Theoretical implications

The study offers significant theoretical implications for integrating corporate governance theories with practical digital tools. In a rapidly evolving corporate environment, traditional governance models based on accountability, transparency, and oversight

should adapt to become more technology-oriented. This shift is driven by stakeholders' increasing ability to communicate through digital tools such as AI, blockchain, and data analytics (Haspada, 2024). In previous studies, governance theories focused on human decision-making and control mechanisms. However, this study highlighted that new standards for reporting accountability are emerging through automated, data-driven information flows. These advancements enhance transparency, enable real-time responsiveness, and foster positive stakeholder engagement, providing a fresh perspective on modern corporate oversight (Zukis, 2022).

Additionally, the study contributes to the development of accounting theory and innovation management by illustrating how digital technologies reshape corporate disclosure practices. Traditional ERP systems, which rely on manual input and static reporting, are being replaced by integrated reporting tools that use real-time data flows and predictive analytics (Zukis, 2022). This evolution challenges long-standing assumptions regarding the timeliness, accuracy, and relevance of financial information in accounting theory.

Furthermore, the research highlighted emerging discussions at the intersection of technology and corporate governance. As digital transformation increasingly influences corporate reporting, future research can build on these insights by examining how governance mechanisms adapt to the complexities introduced by automated systems (Cooray et al., 2020). This includes investigating how board structures, compliance protocols, and risk management frameworks evolve in response to the changing digital landscape (Awan & Pitafi, 2024). By addressing these implications, the study enhances both corporate governance and innovation management literature, highlighting a contemporary framework that integrates traditional governance principles with advanced technological developments. Table 5 summarises the primary digital technology focuses and relevant studies across various industries.

Table 5. Digital tech focus and studies for various industries

<i>Industry</i>	<i>Primary digital technology focus</i>	<i>Example of study or research</i>
Finance	Cybersecurity, compliance, data analytics	"A study on the adoption of blockchain technology in the financial services industry" by McKinsey and Company
Retail	Customer engagement, e-commerce, supply chain management	"The impact of AI on retail: A global perspective" by PricewaterhouseCoopers (PwC)
Healthcare	Electronic health records (EHRs), telemedicine, and medical imaging	"Digital health adoption trends: A global analysis" by Frost and Sullivan
Manufacturing	IoT, automation, Industry 4.0	"The role of digital technologies in manufacturing: A review of literature" by <i>Journal of Manufacturing Systems</i>
Education	E-learning, online courses, virtual classrooms	"The future of education: The impact of digital technologies" by United Nations Educational, Scientific and Cultural Organization (UNESCO)
Government	E-government, citizen services, data governance	"Digital government transformation: A global perspective" by Deloitte

Recent studies have examined the relationship between digital technologies and corporate governance, focusing on how AI, blockchain, and data analytics are transforming reporting processes and disclosure practices. These studies employ various theoretical frameworks to examine

the implications of digital transformation for corporate accountability and transparency, highlighting the advantages of digital innovations in strengthening governance structures. A few of the primary studies with theoretical implications are summarised in Table 6.

Table 6. Summary of selected studies on the main relevant theories and implications

No.	Author(s) and year	Study title	Theory used	Implications
1	Reid et al. (2023)	Transparency reports as CSR reports: Motives, stakeholders, and strategies	Stakeholder theory	Highlights how ICT companies use transparency reports to engage consumers and users, thereby building trust by demonstrating responsible behaviour and protecting user data from government surveillance
2	Hussainey et al. (2022)	Corporate narrative reporting on Industry 4.0 technologies: Does governance matter?	Agency theory	Demonstrate the benefits of strong corporate governance in reducing information asymmetry between managers and shareholders, improving corporate reporting on Industry 4.0 transformations, aligning management actions with shareholders' interests, and enhancing strategic disclosure transparency
3	Bae et al. (2018)	A cross-country investigation of corporate governance and corporate sustainability disclosure: A signaling theory perspective	Signaling theory	How corporate governance elements, such as board independence and foreign shareholding, send positive signals to the market and stakeholders, reducing information asymmetry and enhancing transparency in sustainability reporting practices
4	Mohammed et al. (2023)	Integrated reporting disclosure level in Malaysian public universities: Signalling and institutional theories perspective	Institutional theory	Integrated reporting. How Malaysian Research Universities (RUs) are compelled to adopt higher levels of integrated reporting to meet external expectations and maintain their rankings, thereby enhancing their accountability and institutional legitimacy
5	Nishitani et al. (2021)	Motivations for voluntary corporate adoption of integrated reporting: A novel context for comparing voluntary disclosure and legitimacy theory	Legitimacy theory	By adopting integrated reporting, companies seek to legitimise their actions, improve stakeholder trust, and maintain their reputation, especially in industries where transparency is increasingly valued
6	Liu, Z., Zheng, R., et al. (2022)	Stakeholders and ESG disclosure strategies adoption: The role of goals compatibility and resources dependence	Resource dependency theory	Emphasises the importance of corporations adopting specific ESG disclosure strategies to manage their dependence on external resources, such as investor trust and market opportunities, which are crucial for their sustainable development and long-term success
7	Oktorina et al. (2022)	The diffusion and adoption of integrated reporting: A cross-country analysis on the determinants	Innovation diffusion theory	Explains how the spread of innovative reporting practices influences the adoption of the International Integrated Reporting Framework (IIRF). Companies with strong accounting competencies and competitive pressures are more likely to adopt this innovation, thereby improving the quality of voluntary integrated reporting and aligning corporate reporting with global best practices
8	Borhani et al. (2021)	Adopting blockchain technology to improve financial reporting by using the technology acceptance model (TAM)	Technology acceptance model (TAM)	Highlights that the perceived usefulness and ease of use of blockchain technology are key factors driving its acceptance by both producers and users of financial reports. By analysing these factors, the study identifies how blockchain improves the qualitative characteristics of information, such as transparency and accuracy, thereby enhancing its adoption in financial reporting practices

6. CONCLUSION

This study explores the transformative impact of digital technologies on corporate reporting, emphasising tools like AI, blockchain, and big data analytics. These technologies have significantly advanced financial disclosures, increasing transparency, accuracy, and efficiency. With AI and blockchain, businesses can automate data validation, enhance security, and provide real-time reports, thereby helping to address the growing interest among investors, regulators, and other stakeholders in transparency. Moreover, blockchain technology enhances data integrity, particularly in sustainability and ESG reporting, thereby increasing stakeholder confidence. Digital tools are also evolving and have the potential to transform corporate reporting,

moving it toward a more dynamic, real-time, and transparent approach.

This study is part of the expanding body of work on digital transformation and corporate governance by emphasising how new technologies are disrupting conventional approaches to reporting and accountability. Traditional governance processes, which are mostly manual, standardised, and backwards-looking, become less relevant in the digital context. Our research highlights that digital technologies, including AI, blockchain, and big data analytics, can offer new avenues to achieve more correct, timely, and open disclosure, in addition to being more responsive to stakeholders in real-time. These changes necessitate a redefinition of governance structures that considers ethical practice, data security, and openness in technology-

enabled reporting. Moreover, the results suggest interdisciplinary interactions between accounting, information systems, and organisational studies to develop theoretical frameworks that can describe the complexity of technology-enhanced reporting practices. This interdisciplinary theorising will deepen our comprehension of how digital technology is redefining the process of disclosure, accountability, and decision-making.

In terms of management, the research highlights the pressing need to implement digital technologies to stay competitive and meet the increasing demands of transparent and reliable reporting in organisations. Automation and AI are not luxuries anymore; they are essential to ensuring efficiency and credibility in financial and non-financial reporting. Managers ought not only to invest in digital tools but also in developing their workforce by ensuring that they have the digital skills to adopt and use these technologies effectively. Meanwhile, companies will need to restructure internal governance mechanisms, introduce new reporting systems, and keep pace with changing standards of regulation and assurance. The inability to cope with these changes can lead to a loss of trust, a decrease in stakeholder confidence, and a lack of compliance with new reporting standards. Lastly, through the cultivation of cooperation among technology experts, accountants, and managers, companies can build more efficient reporting mechanisms, which will increase transparency, enhance governance, and boost organisational performance in the digital age.

However, this study has limitations, including a focus on a specific set of keywords, which may exclude relevant publications in languages other than English, and a restriction to English-language articles. Another limitation is the use of datasets from 2015 to 2024, which may constrain the progress of these technologies in the early stages. However, the significance of this study lies in its comprehensive bibliometric analysis, which provides crucial insights into the evolution of digital

technology and corporate reporting and highlights emerging trends and gaps for future exploration. Future research could explore emerging technologies such as blockchain and AI in greater detail and incorporate qualitative methods to deepen understanding of how digital technologies shape corporate reporting and disclosure practices. Further explorations into the role of digital technologies to advance integrated reporting practices.

Future opportunities. Following the analysis presented in this paper, several gaps and trends were identified, particularly in the areas of digital transformation, data analytics, and their integration with corporate governance and financial reporting practices. Although the current literature focuses on financial reporting and corporate governance, domains such as risk management and stakeholder engagement remain underexplored, and there is a notable lack of detailed investigations into how digital technologies can enhance these aspects. Moreover, although technologies such as AI, blockchain, and big data analytics have demonstrated the potential to enhance transparency and efficiency, their role in corporate reporting remains underexplored. Future studies should aim to develop frameworks that address these gaps, particularly regarding how digital transformation can align with corporate governance structures to improve overall corporate performance and accountability.

The potential research questions for future studies include:

- How can blockchain enhance transparency in corporate governance and reporting?
- What impact does AI-driven analytics have on improving real-time risk management in corporate reporting?
- How can digital tools bridge the gap between corporate governance and ESG reporting?
- What frameworks can guide the integration of digital transformation and corporate governance to enhance reporting?

REFERENCES

- Abugre, J. B., & Nyuur, R. B. (2015). Organizations' commitment to and communication of CSR activities: Insights from Ghana. *Social Responsibility Journal*, 11(1), 161-178. <https://doi.org/10.1108/SRJ-06-2013-0066>
- Adelowotan, M. (2024). Digital transformation of corporate reporting. In T. Moloi (Ed.), *Digital transformation in South Africa: Perspectives from an emerging economy* (pp. 137-150). Springer. https://doi.org/10.1007/978-3-031-52403-5_10
- Aderemi, S., Olutimehin, D. O., Nnaomah, U. I., Orieno, O. H., Edunjobi, T. E., & Babatunde, S. O. (2024). Big data analytics in the financial services industry: Trends, challenges, and prospects: A review. *International Journal of Science and Technology Research Archive*, 6(1), 147-166. <https://doi.org/10.53771/ijstra.2024.6.1.0036>
- Akter, S., Michael, K., Uddin, M. R., McCarthy, G., & Rahman, M. (2022). Transforming business using digital innovations: The application of AI, blockchain, cloud and data analytics. *Annals of Operations Research*, 38, 7-39. <https://doi.org/10.1007/s10479-020-03620-w>
- Al Ghunaimi, H., Almagtari, F. A., Wesonga, R., & Elmashtawy, A. (2025). The rise of FinTech and the journey toward a cashless society: Investigating the use of mobile payments by SMEs in Oman in the context of Vision 2040. *Administrative Sciences*, 15(5), Article 178. <https://doi.org/10.3390/admsci15050178>
- Aldboush, H. H., Almasria, N. A., & Ferdous, M. (2023). Determinants of firm profitability: Empirical evidence from Jordan's service sector. *Business: Theory and Practice*, 24(2), 438-446. <https://doi.org/10.3846/btp.2023.18623>
- Aldboush, H., Almasria, N. A., Tawfiq, T. T., & Tawaha, H. (2024). The nexus between dividend payout ratios, return on assets and leverage: A 15-year analysis of Fortune 500 companies. *International Journal of Economics and Finance Studies*, 16(4), 40-73. <https://surl.lt/fplxmj>
- Alduais, F., Almasria, N. A., & Airout, R. (2022). The moderating effect of corporate governance on corporate social responsibility and information asymmetry: An empirical study of Chinese listed companies. *Economies*, 10(11), Article 280. <https://doi.org/10.3390/economies10110280>

- Alduais, F., Almasria, N. A., Samara, A., & Masadeh, A. (2022). Conciseness, financial disclosure, and market reaction: A textual analysis of annual reports in listed Chinese companies. *International Journal of Financial Studies*, 10(4), Article 104. <https://doi.org/10.3390/ijfs10040104>
- Aleqab, M., Airout, R., Alawaqleh, Q., & Almasria, N. A. (2025). The mediating role of innovation in the relationship between corporate governance and organisation performance. *International Journal of Business Information Systems*, 49(3), 431–444. <https://doi.org/10.1504/IJBIS.2025.146984>
- AlGhunaimi, H., & AlGhenaimi, S. (2024). The employee engagement's impact on productivity and motivation in the private higher education sector in Oman. *Journal of Ecohumanism*, 3(6), 869–877. <https://doi.org/10.62754/joe.v3i6.4057>
- Al-Hattami, H. M., Abdullah, A. A. H., Al-Okaily, M., Al-Adwan, A. S., Al-Hakimi, M. A., & Haidar, F. T. (2023). Determinants of interaction intention to purchase online in less developed countries: The moderating role of technology infrastructure. *Cogent Social Sciences*, 9(1), Article 2213918. <https://doi.org/10.1080/23311886.2023.2213918>
- Al-Htaybat, K., & von Alberti-Alhtaybat, L. (2017). Big data and corporate reporting: Impacts and paradoxes. *Accounting, Auditing & Accountability Journal*, 30(4), 850–873. <https://doi.org/10.1108/AAAJ-07-2015-2139>
- Ali, I., Fukofuka, P. T., & Narayan, A. K. (2023). Critical reflections on sustainability reporting standard setting. *Sustainability Accounting, Management and Policy Journal*, 14(4), 776–791. <https://doi.org/10.1108/SAMPJ-01-2022-0054>
- Al-Kasasbeh, O., Almasria, N. A., Almajali, M., Tawfiq, T. T., Al-Okaily, A., & Tawaha, H. (2025). Empirical analysis of non-renewable energy, renewable energy, foreign direct investment, and economic growth on environmental sustainability. *International Journal of Energy Economics and Policy*, 15(3), 515–523. <https://doi.org/10.32479/ijeep.18575>
- Alles, M. G., Dai, J., & Vasarhelyi, M. A. (2021). Reporting 4.0: Business reporting for the age of mass customization. *Journal of Emerging Technologies in Accounting*, 18(1), 1–15. <https://doi.org/10.2308/jeta-10764>
- Almadadha, R. (2024). Blockchain technology in financial accounting: Enhancing transparency, security, and ESG reporting. *Blockchains*, 2(3), 312–333. <https://doi.org/10.3390/blockchains2030015>
- Almasria, N. A., Ershaid, D., & Jalghoum, Y. A. (2025). The role of FinTech in transforming risk management and financial services: A systematic review and meta-analysis. *Financial and Credit Activity: Problems of Theory and Practice*, 2(61), 409–429. <https://doi.org/10.55643/fcaptop.2.61.2025.4698>
- Alnsour, J., Arabeyyat, A. R., Alnsour, A. J., & Almasria, N. A. (2024). The impact of financial development, foreign direct investment, and trade openness on carbon dioxide emissions in Jordan: An ARDL and VECM analysis approach. *Journal of Risk and Financial Management*, 17(11, special issue), Article 490. <https://doi.org/10.3390/jrfm17110490>
- Al-Okaily, A., Al-Okaily, M., & Teoh, A. P. (2023). Evaluating ERP systems success: Evidence from Jordanian firms in the age of the digital business. *VINE Journal of Information and Knowledge Management Systems*, 53(6), 1025–1040. <https://doi.org/10.1108/VJKMS-04-2021-0061>
- Al-Okaily, M. (2023). The influence of e-satisfaction on users' e-loyalty toward e-wallet payment apps: A mediated-moderated model. *International Journal of Emerging Markets*, 20(6), 2428–2454. <https://doi.org/10.1108/IJOEM-08-2022-1313>
- Al-Okaily, M. (2025). The influence of digital disclosure language adoption on decrease financial information asymmetry and increase its quality. *Information Discovery and Delivery*, 53(3), 356–365. <https://doi.org/10.1108/IDD-03-2024-0045>
- Al-Okaily, M., Alqudah, H., Al-Qudah, A. A., Al-Qadi, N. S., Elrehail, H., & Al-Okaily, A. (2022). Does financial awareness increase the acceptance rate for financial inclusion? An empirical examination in the era of digital transformation. *Kybernetes*, 52(11), 4876–4896. <https://doi.org/10.1108/K-08-2021-0710>
- Amankwah-Amoah, J., Khan, Z., Wood, G., & Knight, G. (2021). COVID-19 and digitalization: The great acceleration. *Journal of Business Research*, 136, 602–611. <https://doi.org/10.1016/j.jbusres.2021.08.011>
- Annesi, N., Battaglia, M., Ceglia, I., & Mercuri, F. (2024). Navigating paradoxes: Building a sustainable strategy for an integrated ESG corporate governance. *Management Decision*, 63(2), 531–559. <https://doi.org/10.1108/MD-10-2023-2006>
- Arena, C., Bozzolan, S., & Michelon, G. (2015). Environmental reporting: Transparency to stakeholders or stakeholder manipulation? An analysis of disclosure tone and the role of the board of directors. *Corporate Social Responsibility and Environmental Management*, 22(6), 346–361. <https://doi.org/10.1002/csr.1350>
- Arruda, H., Silva, E. R., Lessa, M., Proença, D., Jr., & Bartholo, R. (2022). VOSviewer and bibliometrix. *Journal of the Medical Library Association*, 110(3), 392–395. <https://doi.org/10.5195/jmla.2022.1434>
- Awan, T. M., & Pitafi, Z. R. (2024). Perspective chapter: Cybersecurity and risk management — New frontiers in corporate governance. In T. M. Awan (Ed.), *Corporate governance: Evolving practices and emerging challenges*. IntechOpen. <https://doi.org/10.5772/intechopen.1005153>
- Awuah, B., Yazdifar, H., & Elbardan, H. (2024). Corporate reporting on the sustainable development goals: A structured literature review and research agenda. *Journal of Accounting & Organizational Change*, 20(4), 617–646. <https://doi.org/10.1108/JAOC-10-2022-0155>
- Bae, S. M., Masud, M. A. K., & Kim, J. D. (2018). A cross-country investigation of corporate governance and corporate sustainability disclosure: A signaling theory perspective. *Sustainability*, 10(8, special issue), Article 2611. <https://doi.org/10.3390/su10082611>
- Barrutia, J. M., & Echebarria, C. (2021). Effect of the COVID-19 pandemic on public managers' attitudes toward digital transformation. *Technology in Society*, 67, Article 101776. <https://doi.org/10.1016/j.techsoc.2021.101776>
- Bickley, S. J., Macintyre, A., & Torgler, B. (2024). *Artificial intelligence and big data in sustainable entrepreneurship*. <https://doi.org/10.2139/ssrn.4686881>
- Borhani, S. A., Babajani, J., Raeesi Vanani, I., Sheri Anaqiz, S., & Jamaliyanpour, M. (2021). Adopting blockchain technology to improve financial reporting by using the technology acceptance model (TAM). *International Journal of Finance & Managerial Accounting*, 6(22), 155–171. <https://surl.li/bmdiuh>
- Cooray, T., Gunaratne, A. D. N., & Senaratne, S. (2020). Does corporate governance affect the quality of integrated reporting? *Sustainability*, 12(10), Article 4262. <https://doi.org/10.3390/su12104262>
- Cort, T., & Esty, D. (2020). ESG standards: Looming challenges and pathways forward. *Organization & Environment*, 33(4), 491–510. <https://doi.org/10.1177/1086026620945342>

- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage.
- Crucean, A. C., & Hategan, C.-D. (2023). Impact of information technology on audit quality: European listed companies' evidence. In S. Grima, K. Sood, & E. Özen (Eds.), *Contemporary studies of risks in emerging technology* (Part B, pp. 327–339). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-80455-566-820231018>
- Fukuda-Parr, S., & Gibbons, E. (2021). Emerging consensus on 'ethical AI': Human rights critique of stakeholder guidelines. *Global Policy*, 12(6, special issue), 32–44. <https://doi.org/10.1111/1758-5899.12965>
- Gandasari, D., Tjahjana, D., Dwidienawati, D., & Sugiarto, M. (2024). Bibliometric and visualized analysis of social network analysis research on Scopus databases and VOSviewer. *Cogent Business & Management*, 11(1), Article 2376899. <https://doi.org/10.1080/23311975.2024.2376899>
- Giese, G., Lee, L.-E., Melas, D., Nagy, Z., & Nishikawa, L. (2019). Foundations of ESG investing: How ESG affects equity valuation, risk, and performance. *The Journal of Portfolio Management*, 45(5), 69–83. <https://doi.org/10.3905/jpm.2019.45.5.069>
- Gill, S. S., Tuli, S., Xu, M., Singh, I., Singh, K. V., Lindsay, D., Tuli, S., Smirnova, D., Singh, M., Jain, U., Pervaiz, H., Sehgal, B., Kaila, S. S., Misra, S., Aslanpour, M. S., Mehta, H., Stankovski, V., & Garraghan, P. (2019). Transformative effects of IoT, blockchain and artificial intelligence on cloud computing: Evolution, vision, trends and open challenges. *Internet of Things*, 8, Article 100118. <https://doi.org/10.1016/j.iot.2019.100118>
- Hahn, R., Reimsbach, D., & Schiemann, F. (2015). Organizations, climate change, and transparency: Reviewing the literature on carbon disclosure. *Organization & Environment*, 28(1), 80–102. <https://doi.org/10.1177/1086026615575542>
- Hamad, S., Draz, M. U., & Lai, F.-W. (2020). The impact of corporate governance and sustainability reporting on integrated reporting: A conceptual framework. *Sage Open*, 10(2). <https://doi.org/10.1177/2158244020927431>
- Han, H., Shiwakoti, R. K., Jarvis, R., Mordi, C., & Botchie, D. (2023). Accounting and auditing with blockchain technology and artificial intelligence: A literature review. *International Journal of Accounting Information Systems*, 48, Article 100598. <https://doi.org/10.1016/j.accinf.2022.100598>
- Haspada, D. (2024). Transformation of business law in the era of industrial revolution 4.0: Implications for business models and corporate governance. *Contemporary Readings in Law and Social Justice*, 16(1), 818–832. https://heinonline.org/hol/cgi-bin/get_pdf.cgi?handle=hein.journals/conreadslj16§ion=64
- Hassan, A., Elamer, A. A., Lodh, S., Roberts, L., & Nandy, M. (2021). The future of non-financial businesses reporting: Learning from the Covid-19 pandemic. *Corporate Social Responsibility and Environmental Management*, 28(4), 1231–1240. <https://doi.org/10.1002/csr.2145>
- Hilton, S. K., & Arkorful, H. (2021). Remediation of the challenges of reporting corporate scandals in governance. *International Journal of Ethics and Systems*, 37(3), 356–369. <https://doi.org/10.1108/IJOES-03-2020-0031>
- Hsu, Y.-L., & Yang, Y.-C. (2022). Corporate governance and financial reporting quality during the COVID-19 pandemic. *Finance Research Letters*, 47, Article 102778. <https://doi.org/10.1016/j.frl.2022.102778>
- Hussainey, K., Albitar, K., & Alkaraan, F. (2022). Corporate narrative reporting on Industry 4.0 technologies: Does governance matter? *International Journal of Accounting & Information Management*, 30(4), 457–476. <https://doi.org/10.1108/IJAIM-02-2022-0024>
- Ibrahim, A., Almasria, N. A., Alhatabat, Z. A., Ershaid, D. J. A., & Aldboush, H. H. (2025). Transforming financial services with artificial intelligence and machine learning: Insights into opportunities and emerging trends. In D. Darwish & S. Kumar (Eds.), *Utilizing AI and machine learning in financial analysis* (pp. 129–148). IGI Global Scientific Publishing. <https://doi.org/10.4018/979-8-3693-8507-4.ch008>
- Jejenywa, T. O., Mhlongo, N. Z., & Jejenywa, T. O. (2024). A comprehensive review of the impact of artificial intelligence on modern accounting practices and financial reporting. *Computer Science & IT Research Journal*, 5(4), 1031–1047. <https://doi.org/10.51594/csitrj.v5i4.1086>
- Kamara, I. (2024). European cybersecurity standardisation: A tale of two solitudes in view of Europe's cyber resilience. *Innovation: The European Journal of Social Science Research*, 37(5, special issue), 1441–1460. <https://doi.org/10.1080/13511610.2024.2349626>
- Khin, S., & Ho, T. C. F. (2019). Digital technology, digital capability and organizational performance: A mediating role of digital innovation. *International Journal of Innovation Science*, 11(2), 177–195. <https://doi.org/10.1108/IJIS-08-2018-0083>
- Kibria, M. G., Nguyen, K., Villardi, G. P., Zhao, O., Ishizu, K., & Kojima, F. (2018). *Big data analytics, machine learning, and artificial intelligence in next-generation wireless networks*. Cornell University. <https://doi.org/10.48550/arXiv.1711.10089>
- Kshetri, N. (2017). Blockchain's roles in strengthening cybersecurity and protecting privacy. *Telecommunications Policy*, 41(10), 1027–1038. <https://doi.org/10.1016/j.telpol.2017.09.003>
- Kumar, S., Lim, W. M., Sivarajah, U., & Kaur, J. (2023). Artificial intelligence and blockchain integration in business: Trends from a bibliometric-content analysis. *Information Systems Frontiers*, 25, 871–896. <https://doi.org/10.1007/s10796-022-10279-0>
- Lam, W. H., Lam, W. S., Jaaman, S. H., & Lee, P. F. (2022). Bibliometric analysis of information theoretic studies. *Entropy*, 24(10), Article 1359. <https://doi.org/10.3390/e24101359>
- Li, R., Liu, Z., Ma, Y., Yang, D., & Sun, S. (2022). Internet financial fraud detection based on graph learning. *IEEE Transactions on Computational Social Systems*, 10(3), 1394–1401. <https://doi.org/10.1109/TCSS.2022.3189368>
- Li, Z., Xie, B., Chen, X., & Fu, Q. (2024). Corporate digital transformation, governance shifts and executive pay-performance sensitivity. *International Review of Financial Analysis*, 92, Article 103060. <https://doi.org/10.1016/j.irfa.2023.103060>
- Liu, Z., Zheng, R., Qiu, Z., & Jiang, X. (2022). Stakeholders and ESG disclosure strategies adoption: The role of goals compatibility and resources dependence. *Elementa: Science of the Anthropocene*, 10(1), Article 00044. <https://doi.org/10.1525/elementa.2022.00044>
- Lutfi, A., Alkelani, S. N., Al-Khasawneh, M. A., Alshira'h, A. F., Alshirah, M. H., Almaiah, M. A., Alrawad, M., Alsyouf, A., Saad, M., & Ibrahim, N. (2022). Influence of digital accounting system usage on SMEs performance: The moderating effect of COVID-19. *Sustainability*, 14(22), Article 15048. <https://doi.org/10.3390/su142215048>

- Macpherson, M., Gasperini, A., & Bosco, M. (2021). *Artificial intelligence and FinTech technologies for ESG data and analysis*. <https://doi.org/10.2139/ssrn.3790774>
- Meng, S., Su, H., & Yu, J. (2022). Digital transformation and corporate social performance: How do board independence and institutional ownership matter? *Frontiers in Psychology*, 13, Article 915583. <https://doi.org/10.3389/fpsyg.2022.915583>
- Mergel, I., Edelman, N., & Haug, N. (2019). Defining digital transformation: Results from expert interviews. *Government Information Quarterly*, 36(4), Article 101385. <https://doi.org/10.1016/j.giq.2019.06.002>
- Miniaoui, Z., Chibani, F., & Hussainey, K. (2022). Corporate governance and CSR disclosure: International evidence for the period 2006–2016. *Journal of Risk and Financial Management*, 15(9), Article 398. <https://doi.org/10.3390/jrfm15090398>
- Mohammed, N. F., Lokman, N., Halim, N. H. A., & Yusof, F. (2023). Integrated reporting disclosure level in Malaysian public universities: Signalling and institutional theories perspective. *IPN Journal of Research and Practice in Public Sector Accounting and Management*, 13(1), 81–100. <https://doi.org/10.58458/ipnj.v13.01.05.0089>
- Muratovski, G. (2015). Paradigm shift: Report on the new role of design in business and society. *She Ji: The Journal of Design, Economics, and Innovation*, 1(2), 118–139. <https://doi.org/10.1016/j.sheji.2015.11.002>
- Murdayanti, Y., & Khan, M. N. A. A. (2021). The development of internet financial reporting publications: A concise of bibliometric analysis. *Heliyon*, 7(12), Article e08551. <https://doi.org/10.1016/j.heliyon.2021.e08551>
- Murikah, W., Nthenge, J. K., & Musyoka, F. M. (2024). Bias and ethics of AI systems applied in auditing—A systematic review. *Scientific African*, Article e02281. <https://doi.org/10.1016/j.sciaf.2024.e02281>
- Ng, S. L. (2024). Striking the balance: Accounting regulatory compliance and standards in FinTech. In F. Naz & S. Karim (Eds.), *Safeguarding financial data in the digital age* (pp. 214–237). IGI Global Scientific Publishing. <https://doi.org/10.4018/979-8-3693-3633-5.ch012>
- Nishitani, K., Unerman, J., & Kokubu, K. (2021). Motivations for voluntary corporate adoption of integrated reporting: A novel context for comparing voluntary disclosure and legitimacy theory. *Journal of Cleaner Production*, 322, Article 129027. <https://doi.org/10.1016/j.jclepro.2021.129027>
- Oktorina, M., Siregar, S. V., Adhariani, D., & Mita, A. F. (2022). The diffusion and adoption of integrated reporting: A cross-country analysis on the determinants. *Meditari Accountancy Research*, 30(1), 39–73. <https://doi.org/10.1108/MEDAR-12-2019-0660>
- Prakash, S., Malaiyappan, J. N. A., Thirunavukkarasu, K., & Devan, M. (2024). Achieving regulatory compliance in cloud computing through ML. *Advanced International Journal of Multidisciplinary Research*, 2(2), 1–15. <https://doi.org/10.62127/aijmr.2024.v02i02.1038>
- Reid, A., Ringel, E., & Pendleton, S. M. (2023). Transparency reports as CSR reports: Motives, stakeholders, and strategies. *Social Responsibility Journal*, 20(1), 81–107. <https://doi.org/10.1108/SRJ-03-2023-0134>
- Sabour, K. A., & Al-Waeli, A. (2023). The effect of blockchain technology as a moderator on the relationship between big data and the risk of financial disclosure (analytical study in the Egyptian and Iraqi Stock Exchange). *Eastern-European Journal of Enterprise Technologies*, 1(13), 132–142. <https://doi.org/10.15587/1729-4061.2023.274641>
- Sharma, Y., Balamurugan, B., Snegar, N., & Ilavendhan, A. (2021). How IoT, AI, and blockchain will revolutionize business. In N. Chilamkurti, T. Poongodi, & B. Balusamy (Eds.), *Blockchain, Internet of Things, and artificial intelligence* (1st ed., pp. 235–255). Chapman and Hall/CRC. <https://doi.org/10.1201/9780429352898-13>
- Sima, V., Gheorghie, I. G., Subić, J., & Nancu, D. (2020). Influences of the Industry 4.0 revolution on the human capital development and consumer behavior: A systematic review. *Sustainability*, 12(10), Article 4035. <https://doi.org/10.3390/su12104035>
- Solaimani, S. (2024). From compliance to capability: On the role of data and technology in environment, social, and governance. *Sustainability*, 16(14), Article 6061. <https://doi.org/10.3390/su16146061>
- Stolowy, H., & Paugam, L. (2018). The expansion of non-financial reporting: An exploratory study. *Accounting and Business Research*, 48(5), 525–548. <https://doi.org/10.1080/00014788.2018.1470141>
- Sun, Z., Liu, L., Zhao, L., Korayim, D., & Alghafes, R. (2025). Can chain leaders stop greenwashing practices in supply chain governance? An empirical investigation into business strategies. *Corporate Social Responsibility and Environmental Management*, 32(5), 5795–5817. <https://doi.org/10.1002/csr.70011>
- Sunyaev, A., & Sunyaev, A. (2020). Cloud computing. In A. Sunyaev (Ed.), *Internet computing: Principles of distributed systems and emerging internet-based technologies* (pp. 195–236). Springer.
- Troshani, I., Janssen, M., Lymer, A., & Parker, L. D. (2018). Digital transformation of business-to-government reporting: An institutional work perspective. *International Journal of Accounting Information Systems*, 31, 17–36. <https://doi.org/10.1016/j.accinf.2018.09.002>
- van Eck, N. J., & Waltman, L. (2017). Citation-based clustering of publications using CitNetExplorer and VOSviewer. *Scientometrics*, 111, 1053–1070. <https://doi.org/10.1007/s11192-017-2300-7>
- Widiawati, L. (2020). A systematic literature review of socially responsible investment and environmental social governance metrics. *Business Strategy and the Environment*, 29(2), 619–637. <https://doi.org/10.1002/bse.2393>
- Wu, W., Chen, W., Fu, Y., Jiang, Y., & Huang, G. Q. (2022). Unsupervised neural network-enabled spatial-temporal analytics for data authenticity under environmental smart reporting system. *Computers in Industry*, 141, Article 103700. <https://doi.org/10.1016/j.compind.2022.103700>
- Ziniuk, M., Deeva, N., Bogatyryova, K., Melnychenko, S., Fayvishenko, D., & Shevchun, M. (2022). Digital transformation of corporate governance. *Financial and Credit Activity Problems of Theory and Practice*, 5(46), 300–310. <https://doi.org/10.55643/fcaptop.5.46.2022.3807>
- Zukis, B. (2022). Digital and cybersecurity governance around the world. *Annals of Corporate Governance*, 7(1), 1–92. <https://doi.org/10.1561/109.000000032>
- Zupic, I., & Čater, T. (2015). Bibliometric methods in management and organization. *Organizational Research Methods*, 18(3), 429–472. <https://doi.org/10.1177/1094428114562629>