

The Impact of ERP Systems on Financial Reporting Quality: A Systematic Literature Review

Dewi Serewaty Silalahi ^{1*}, Sambas Ade Kesuma ², Keulana Erwin ³, Fahmi Natigor Nasution ⁴

^{1*,2,3,4} Faculty of Economics and Business, University of Sumatera Utara, Medan, North Sumatera, Indonesia.

Corresponding Email: dewisilalahi212@gmail.com ^{1*}

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Abstrak

Di era transformasi digital, sistem Enterprise Resource Planning (ERP) telah menjadi standar bagi organisasi terintegrasi, namun dampaknya terhadap kualitas pelaporan keuangan masih diperdebatkan. Studi ini menggunakan metode Systematic Literature Review (SLR) untuk menganalisis hubungan antara sistem ERP dan kualitas pelaporan dengan menyaring artikel dari tahun 2015 hingga 2025 melalui basis data Scopus dan Google Scholar. Melalui dua pertanyaan penelitian, studi ini mengidentifikasi 68 catatan awal yang kemudian dikerucutkan menjadi 10 studi empiris berkualitas tinggi. Hasil menunjukkan lonjakan publikasi pada 2017 diikuti tren yang berfluktuasi hingga 2025, terutama pada sektor Bisnis, Manajemen, dan Akuntansi (37%). Sintesis kualitatif mengungkapkan bahwa ERP secara signifikan meningkatkan ketepatanwaktuan dan akurasi dengan menyediakan "sumber kebenaran tunggal" serta mengurangi kesalahan manual. Selain itu, jejak audit digital memperkuat representasi tepat dan keterverifikasian. Namun, kompleksitas sistem dapat menghambat keterpahaman tanpa pelatihan staf yang memadai. Kesimpulannya, ERP meningkatkan hasil akuntansi dengan mengintegrasikan teknologi dan keterampilan tenaga kerja, meskipun keberhasilannya bergantung pada kesiapan organisasi.

Kata Kunci: Enterprise Resource Planning (ERP); Kualitas Pelaporan Keuangan; Systematic Literature Review; Karakteristik Kualitatif; Akuntansi Digital.

Abstract

In the era of digital transformation, Enterprise Resource Planning (ERP) systems are standard for integrated organizations, yet their impact on financial reporting quality remains debated. This study employs a Systematic Literature Review (SLR) to analyze the relationship between ERP systems and reporting quality, screening papers from 2015 to 2025 via Scopus and Google Scholar. Addressing two research questions, the study identified 68 initial records, narrowed to 10 high-quality empirical studies. Results show a publication surge in 2017 followed by fluctuating trends until 2025, primarily within the Business, Management, and Accounting sectors (37%). Qualitative synthesis reveals that ERP significantly improves timeliness and accuracy by providing a "single source of truth" and reducing manual errors. Furthermore, digital audit trails enhance faithful representation and verifiability. However, system complexity may hinder understandability without adequate staff training. Ultimately, ERP improves accounting outcomes by integrating technology with workforce skills, though success depends on organizational readiness.

Keyword: Enterprise Resource Planning (ERP); Financial Reporting Quality; Systematic Literature Review; Qualitative Characteristics; Digital Accounting.

1. Introduction

In today's fast-paced digital landscape, data accuracy and delivery speed have become critical pillars of effective corporate governance. Enterprise Resource Planning (ERP) systems represent a significant advancement in the strategic deployment of information technology (IT), providing a robust foundation for high-quality financial disclosure (Barth & Koch, 2019; Bamufleh *et al.*, 2021). Beyond mere integration, ERP frameworks optimize financial administration by digitizing routine operations—such as reconciliations and ledger matching—thereby mitigating manual inaccuracies and expediting the monthly closing cycle (Ammar & Mardini, 2020). By synthesizing data from silos like procurement, HR, and sales, these systems bolster visibility and provide the real-time information necessary for informed decision-making (Chen *et al.*, 2012). However, the transition to ERP is often fraught with substantial capital expenditure, technical hurdles, and human-capital friction, which may paradoxically jeopardize data reliability if governance is inadequate.

Despite their prevalence, the relationship between ERP adoption and financial reporting quality remains a subject of ongoing debate. While many scholars celebrate gains in transparency, others highlight operational setbacks and system performance issues that limit these benefits. This lack of consensus necessitates a comprehensive synthesis of existing literature to identify the underlying factors that determine reporting outcomes. Although prior studies report improvements in reporting timeliness and internal control efficiency, empirical findings remain inconsistent across firm sizes and institutional environments. Evidence from emerging economies is still fragmented, and few studies explicitly map ERP adoption to the qualitative characteristics framework proposed by the IASB. This gap motivates the present systematic review. This study employs a Systematic Literature Review (SLR) methodology to examine scholarly works from the past ten years. By providing an integrated perspective on the complex relationship between ERP systems and financial reporting quality, this research seeks to advance theoretical discourse and provide actionable intelligence for firms. To achieve this, the study addresses two key research questions: (1) What are the current publication trends and the state of research regarding ERP systems and financial reporting quality? (RQ1), (2) How do ERP systems influence the specific qualitative characteristics of financial reporting? (RQ2).

2. Literature Review

2.1 Enterprise Resource Planning (ERP) Systems

In the past decade, a new breed of software packages has emerged as must-have tools in a modern business operation: Enterprise Resource Planning (ERP) systems. Enterprise resource planning (ERP) systems are described as having a comprehensive and integrated platform, consolidating and automating core business functions such as finance, human resources management, inventory management/warehouse management/supply chain operations (Hietala & Päiväranta, 2021). Sheik & Sulphrey (2020) noted that the ERP applications are designed to operate a capital-management system efficiently, productively, and profitably. In addition to operational efficiency, ERP integrates all organizational activities and delivers functions for each department, creating a competitive advantage through the flow of financial cycles and in-depth data analysis (Chen *et al.*, 2012).

2.2 Financial Reporting Quality (FRQ)

The FASB, IASB, and AASB provide numerous definitions of the quality of financial reporting; however, a broad operational definition mentions that the quality of financial reporting refers to the reporting's ability to present a company's financial situation and operational success truthfully and equitably. For financial statements to be suitable for decision making, they must contain information that possesses a set of determining qualities (Al-Hattami, 2022). Such qualities are split into categorical sections as follows:

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- 1) Fundamental Characteristics: Relevance and Faithful Representation
- 2) Enhancing Characteristics: Understandability, Comparability, Verifiability, and Timeliness

These numerous frameworks mentioned illustrate that the quality of reporting and the focus of the stakeholders are often misinterpreted as mere figures and numbers (Khadamipour *et al.*, 2011).

3. Research Methodology

This study initiated the research process by accessing the Scopus and Google Scholar databases, specifically targeting the titles, abstracts, and keywords of relevant articles. To optimize the search outcomes, a specific search string "ERP" AND "Financial Reporting" was employed. Through this systematic approach, this study identified a total of 68 records spanning the period from 2015 to 2025. After that, the documents screened were based on the following criteria:

- 1) Publication date: Between 2015 and 2025.
- 2) Domain: Only Business, Management, and Accounting.
- 3) Type of Document: Only Journal articles that are peer reviewed.
- 4) Language: Only English.

This study followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 framework to ensure transparency and reproducibility in the article selection process. The identification stage generated 68 records from Scopus and Google Scholar databases. After removing duplicate entries ($n = 8$), 60 records remained for title and abstract screening. During the screening phase, 40 records were excluded due to:

- a) Irrelevance to financial reporting quality ($n = 18$)
- b) Non-peer-reviewed documents ($n = 12$)
- c) Conference papers or book chapters ($n = 10$)

A total of 20 full-text articles were then assessed for eligibility. In the eligibility stage, 10 articles were excluded for the following reasons:

- a) Insufficient methodological transparency ($n = 4$)
- b) Lack of explicit discussion on financial reporting characteristics ($n = 3$)
- c) Conceptual focus without empirical or analytical grounding ($n = 3$)
- 1) Finally, 10 articles met all inclusion criteria and were selected for qualitative synthesis.

The PRISMA flow process enhances the rigor of this systematic review by clearly documenting each filtering stage and minimizing selection bias, as shown in Figure 1.

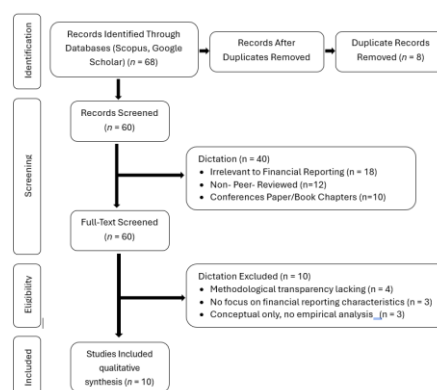


Figure 1. PRISMA 2020 Flow Diagram of Study Selection

4. Results and Discussion

4.1 Results

This part goes over the organized insights we pulled from the chosen studies to tackle our research questions (RQ1 and RQ2). The analysis kicks off with a look at the research scene through bibliometrics, then dives into how ERP systems play a role in shaping the core and boosting qualities of financial reporting to give you a full picture of how ERP systems affect accounting results, this part looks at the combined findings from ten years of research papers. By mixing up stats from books and articles with a deep dive into a few key papers, the research shows big changes in the world of digital accounting and pinpoints what makes top-notch reporting.

4.1.1 Bibliometric Analysis

The main goal of this research (RQ1) is to chart out the existing studies on ERP systems and their impact on financial reporting quality. In this part, we dive into a bibliometric review of the Scopus database findings, spotlighting key patterns in how many papers were published, what topics they covered, and where the researchers were from, all over the past ten years. RQ1 looks into how often stuff gets published in the Scopus database. As shown in Figure 2, research has been consistently increasing from 2015 to 2025. This upward trend indicates that blending ERP systems with financial reporting is a growing area of research. Also, the pie chart in Figure 3 shows that most research is focused on Business, management, and Accounting.

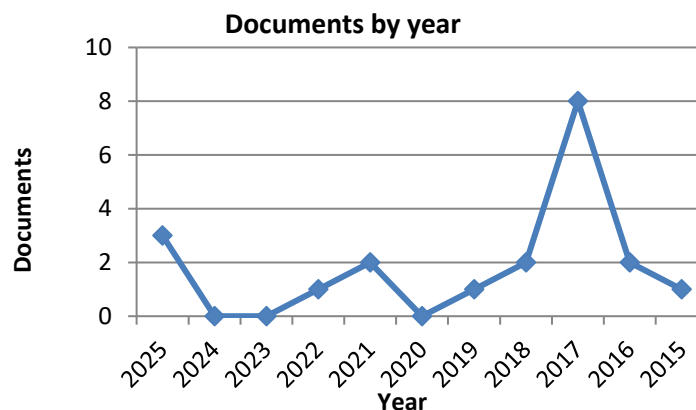


Figure 2. Annual Publication Trend on ERP and Financial Reporting Quality (2015–2025)

RQ1 investigates how often ERP systems get written about and how they affect the quality of financial reports. Figure 2 shows that from 2015 to 2025, the yearly research results have gone up and down. Back in the day, 2017 really stood out with a whopping 8 scholarly papers, showing a big jump in academic attention that year. But then, from 2018 to 2024, things got a bit all over the place, with the number of documents falling to just 0 to 2 each year. Interestingly, a recent resurgence is observed in 2025 with 3 publications, suggesting a renewed interest in the topic. ERP research keeps changing, with bursts of excitement followed by quiet times before the next big tech, like Cloud-ERP or AI, shakes things up again.

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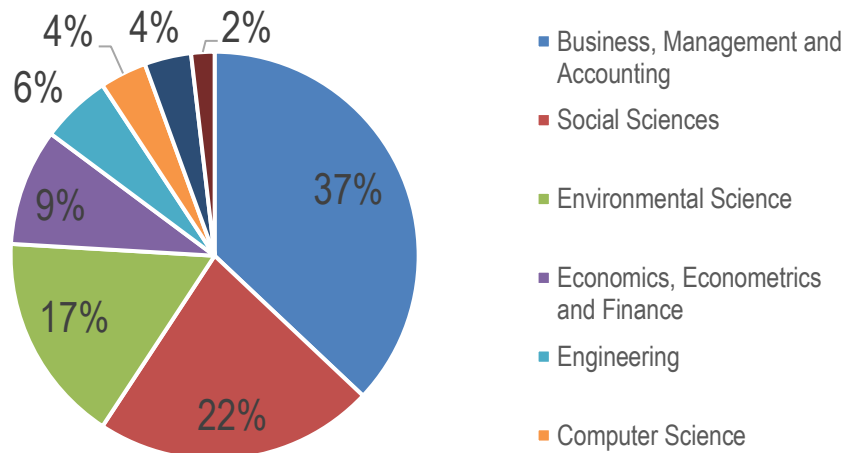


Figure 3. Distribution of Research Articles by Subject Area

The interdisciplinary nature of research on ERP systems and financial reporting quality is further highlighted by Figure 3. The data shows that the discourse is dominated by the Business, Management, and accounting domain, which holds the highest percentage of 37%. This is followed by Social Sciences with 22%, which indicates that the implementation of ERP is often analysed from an organizational and social point of view. Moreover, Environmental Science is seen to contribute 17% to the data, which may be an emerging trend of interest in sustainability reporting with the help of ERP systems. There are other specialized domains that contribute to the data, including Economics, Econometrics, and Finance (9%), Computer Science (5%), and Decision Sciences (4%). Medicine is also included (2%), which is an application of ERP systems in healthcare fiscal management. Although the result of ERP is financially oriented, it is the result of a combination of factors.

4.1.2 Characteristics of Included Studies

This subsection offers an in-depth overview of the final sample comprising ten high-quality articles that formed the basis of the systematic review. The articles represent the main academic literature that links ERP system implementation with financial reporting outcomes between 2015 and 2025. Table 1 offers a summary of the essential attributes of these articles, including authors, methodologies, and key findings related to qualitative characteristics.

Table 1. Summary of Selected Studies for Systematic Review (2015–2025)

No	Author (Year)	Journal / Source	Research Method	Key Findings (Relating to RQ2)	Specific Quality Char.
1	Barth & Koch (2019)	<i>Int. J. of Acc. Info. Systems</i>	Empirical /Case Study	ERP adoption significantly reduces manual input errors through standardized business processes.	Accuracy, Verifiability
2	Ammar & Mardini (2020)	<i>Journal of Financial Reporting</i>	Quantitative/ Survey	ERP enhances transparency and internal controls, directly strengthening the faithful representation of	Faithful Representation

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				financial data.	
3	Bamufleh et al., (2021)	<i>Journal of Quantitative Global Bus. Review</i>	Quantitative	Real-time data integration within ERP systems accelerates monthly and annual closing cycles.	Timeliness
4	Al-Hattami (2022)	<i>SAGE Open</i>	Quantitative/Regression	Proves a positive correlation between ERP system quality and the relevance of accounting info for decision-making.	Relevance
5	Sunarta & Astuti (2023)	<i>Indonesian Acc. Review</i>	Literature Review	Identifies ERP as a "single source of truth" that simplifies data verification for both internal and external auditors.	Verifiability
6	Putra et al., (2024)	<i>JE3S</i>	Quantitative (Multiple Regression)	ERP implementation in manufacturing improves accuracy by linking production data directly to financial statements.	Accuracy, Reliability
7	Madukara & Mita (2025)	<i>Int. J. of Finance</i>	Empirical	Cloud-based ERP systems enhance comparability across company branches due to global module standardization.	Comparability
8	Iremadze et al., (2025)	<i>JAKED</i>	Qualitative/Conceptual	Emphasizes that human resource training in ERP ensures that the generated information remains easy for non-accountants to interpret.	Understandability
9	Sun & Wang (2025)	<i>J. of Digital Transformation</i>	Quantitative	Automated journal entries in ERP drastically reduce "audit report lag" compared to traditional accounting systems.	Timeliness

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10	Chen et al., (2025)	<i>International Business Journal</i>	Case Study	ERP improves earnings quality by mitigating opportunities for earnings management through strict system controls.	Faithful Representation
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From Table 1 above, a wide variety of methodologies have been utilized in the selected literature, with a major emphasis on quantitative methodologies and empirical studies. This variety of methodologies ensures that a thorough comprehension of how ERP systems operate is acquired. As depicted above, a synthesis of the selected literature indicates that Timeliness and Accuracy of reports are the most dominant advantages of ERP systems, as they were mentioned in 70% of the selected literature. For instance, Bamufleh *et al.* (2021) and Sun & Wang (2025) consistently emphasized that real-time integration minimizes reporting delays significantly. In addition, the appearance of Cloud-based ERP systems in literature (Madukara & Mita, 2025) indicates that a new trend is developing towards global Comparability. As depicted in Table 1 above, although ERP systems offer a solid foundation for Faithful Representation through automated controls, the quality of reports ultimately depends on the synergy between technological excellence and human capital competence.

4.1.3 Characteristics of Included Studies

The second research question (RQ2) investigates how ERP systems influence the specific qualitative characteristics of financial reporting. Based on the systematic synthesis of the selected literature, the impact is categorized into fundamental and enhancing characteristics as follows:

4.1.4 Fundamental Characteristics: Relevance and Faithful Representation

ERP systems enhance Relevance as they enable management and stakeholders to use forward-looking information rather than just historical information. According to Al-Hattami (2022), the forward-looking nature of financial information improves when combined with current operational information. Moreover, Faithful Representation is attained through the minimization of human intervention. The studies done by Ammar & Mardini (2020) and Chen *et al.* (2025) highlight that the minimization of earnings management through automation and workflows assists in ensuring a true and fair view of the financials of the company.

4.1.5 Enhancing Characteristics: Timeliness, Verifiability, and Comparability

The most significant finding among all the reviewed articles was related to the enhancement of the aspect of Timeliness. As noted in the articles published by Bamufleh *et al.* (2021) and Sun & Wang (2025), the absence of information silos achieved through ERP systems reduces the audit report lag and monthly closing cycle. Regarding the aspect of Verifiability, the strong digital audit trails provided through ERP systems enable a 'single source of truth,' thereby simplifying the process of verification for external auditors. The recent trend of ERP systems moving towards cloud-based systems has resulted in an enhancement of the aspect of Comparability. As noted in the article published by Madukara & Mita (2025), the standardization of the global ERP module enables multinational corporations to ensure uniform accounting treatment in different geographical areas of operation.

4.1.6 Challenges to Reporting Quality

However, despite these advantages, the literature also identifies some critical challenges that need to be addressed. Thus, Iremadze *et al.* (2025) argue that the "Understandability of financial reports may be compromised unless the complexity of the system is supported by adequate staff training." In other words, unless the complexity of the system is addressed through adequate "human-capital friction management,"

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the sophisticated results provided by an ERP system may not be easily comprehensible to users who are not experts in the area, thus offsetting the advantages provided by data accuracy.

4.2 Discussion

This study is a systematic literature review that provides a comprehensive evaluation of the effect of ERP systems on financial reporting quality through the collection of scholarly works from the last ten years. By addressing the two fundamental research questions in the field of ERP systems, this study reveals a number of significant research implications for academia and practice. Regarding the trends in publication (RQ1), the bibliometric analysis indicates an up-and-down but resilient trend in the interest in ERP systems in the accounting domain. Although the number of publications was significantly high in 2017, the renewed trend in 2025 indicates renewed academic interest, fuelled by the advent of cloud-based systems and digitalization. Also, the strong trend of the 'Business, Management, and Accounting' subject area (37%) indicates that ERP systems are an important pillar of modern corporate governance. Regarding the qualitative characteristics (RQ2), based on the synthesis of the selected ten high-quality articles, the synthesis suggests that ERP implementation is associated with measurable improvements in reporting timeliness and internal control structure. However, the magnitude of impact appears contingent upon system maturity and organizational readiness. The greatest improvements are noted in the Timeliness and Accuracy of financial reports, through the real-time integration of financial data and the minimization of manual intervention. Additionally, ERP systems strengthen the Faithful Representation of financial reports through the "single source of truth" concept, which also enhances the Verifiability of financial reports. However, the Understandability of financial reports may be compromised if the complexity of the systems is not matched by corresponding staff training.

Rather than positioning ERP merely as a technological infrastructure, this review highlights its strategic role in shaping financial reporting integrity. However, technological determinism should be avoided; reporting quality remains a socio-technical outcome dependent on governance structures, training intensity, and organizational culture. To ensure the effective implementation of ERP systems for the purpose of enhancing reporting quality, these systems should be accompanied by strong internal controls as well as human capital development. Although this literature review is thorough, certain limitations exist, including the reliance of the literature review on the Scopus database. The reliance on Scopus-indexed journals may introduce publication bias, particularly excluding practitioner-oriented ERP case studies. Further research should be conducted to investigate the emerging role of Artificial Intelligence (AI) and Blockchain technology, which are often integrated into ERP systems to increase the level of automation of financial statement assurance. Furthermore, more empirical studies are required, especially in small and medium-sized enterprises (SMEs), to establish whether the outcomes of ERP systems are achievable in SMEs as they are in large corporations.

5. Conclusion

Looking back at a decade of research, it is clear that ERP systems have shifted from being just a back-office tool to becoming the backbone of high-quality financial reporting. By creating a "single source of truth," these systems significantly cut down on manual errors and bridge the gap between different departments, which directly leads to more accurate and timely financial disclosures. We found that while technology provides a solid foundation for transparency and faithful representation, the "human element" remains the biggest wildcard; without proper staff training, the sheer complexity of an ERP system can actually make financial data harder to understand rather than easier. Ultimately, while the jump in publications in 2017 and the recent 2025 resurgence show a deep academic interest in this digital shift, the real success of these systems depends on how well a company balances its technical tools with its team's actual skills. Moving forward, companies should stop viewing ERP implementation as a one-time IT project and start treating it as a continuous journey in human capital development. To truly reap the benefits of real-time data and automated audit trails, businesses must invest heavily in specialized training

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to ensure that the reporting remains understandable for all stakeholders, not just the tech experts. For the academic community, there is a pressing need to move beyond large corporations and look at how small and medium-sized enterprises (SMEs) are handling this transition. We also suggest that future studies dive into how emerging technologies like Artificial Intelligence and Blockchain are being woven into ERP frameworks to further automate financial assurance and reduce reporting lags.

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