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DIGITAL TRANSFORMATION IN MSME ACCOUNTING: A REVIEW OF ARTIFICIAL INTELLIGENCE ADOPTION FROM 2000 TO 2025

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ABSTRACT

The advancement of AI and digitalized technologies providing potentials to Micro, Small and Medium Enterprises in terms of efficiency and transparency in context of accounting. This study presents a systematic review of AI adoption in MSME accounting from 2000 to 2025. The objectives are to examine technological evolution, adoption and professional implications. Following the PRISMA-based methodology, 416 records were initially identified across major academic databases. After removal of duplicates and eligibility screening, 53 high quality peer-reviewed studies have been included for final analysis. The review reveals a clear evolutionary progression from early expert system to advanced technologies like machine learning, robotic process automation (RPA), big data analytics, cloud accounting and intelligent audit systems. The results indicate that AI integration enhances reporting accuracy, fraud detection and real-time financial analysis. It has also shifted the accountant's role from daily and routine processing toward analytical and advisory works. Overall, the study summarizes the literature and provide a base for further studies and policy making.

KEYWORDS: Artificial Intelligence, Digital Transformation, MSMEs, Accounting, AI Adoption, Systematic Review

Statements and Declaration

- **Competing Interest:** The authors declare no competing interests.
- **Data Availability Statement:** This study is based on a systematic review of previously published literature. All data used in the study are obtained from publicly accessible academic databases and are properly cited within the article. No primary datasets were generated.
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INTRODUCTION

Micro, Small and Medium Enterprises (MSMEs) are widely recognized in developed and developing economies both as dynamic economic units. Because these units significantly contribute to production and development. It is true that there is no fix or universal definition of MSMEs but international organizations categorize them on the basis of their firm size, turnover, number of employees and balance sheet criteria. It reflects variations in economic structures and policy priorities across countries. For instance, definitions used by bodies such as the International Labor Organization (ILO), the International Finance Corporation (IFC) and Eurostat commonly classify micro enterprises as those who have at most 10 employees, small enterprises with maximum 50 employees and medium enterprises with maximum 200-250 employees, underscoring employment as a primary quantitative criterion in global research frameworks (UNESCAP, 2025). Such heterogenous definitions indicate that MSMEs constitute a large majority of businesses worldwide and also crucial for local employment generation and economic resilience (UNESCAP, 2025). In the Indian context, MSMEs are defined in Micro, Small and Medium Enterprises Development (MSMED) Act, 2006, and follow the combined criterion of budgeting into in plant & machinery/equipment combined with annual turnover. Amendments effective from April 1, 2025 classify micro enterprises as those having investment not exceeding ₹2.5 crore and turnover up to ₹10 crore, small enterprises having investment up to ₹25 crore and turnover up to ₹100 crore, and medium enterprises having investment up to ₹125 crore and turnover up to ₹500 crore (Banking School, 2025; IndiaFilings, 2026). This composite framework aims to standardize MSME categorization across the manufacturing and services sectors and aligns India's statutory definition with evolving global practice in SME research. The limits for MSMEs can be understand through *Table 1*:

Table 1: Investment and Turnover limit for MSMEs in India

Enterprise	Investment Limit [In Cr.]	Turnover Limit [In Cr.]
Micro	2.5	10
Small	25	100
Medium	125	500

Source : <https://msme.gov.in/know-about-msme>

Importance of Accounting for MSMEs

Accounting has a crucial role in enhancement of sustainability, transparency and potential of any organization. Globally, MSMEs operate with limited financial and managerial resources. They maintain structured accounting systems because they are essential for effective decision making, cost controlling and performance evaluating. Through the proper accounting practice, enterprises become capable to maintain reliable financial records. Due to this system, it reduces information asymmetry



between firms and stakeholders. Empirical studies show that quality of financial reporting significantly influence the finance of the business (World Bank, 2020). Similarly, the Organization for Economic Co-operation and Development (OECD, 2018) emphasizes that structured accounting practices strengthen creditworthiness. This provides basis for integration of MSMEs into formal financial systems and global value chains.

Accounting systems have become important due to statutory and tax compliance requirements in India because India has many government frameworks like the Ministry of MSMEs guidelines and Goods & Services Tax (GST) regulations etc. As MSMEs are defined on investment and turnover thresholds basis, accurate accounting records are must to determine such eligibility. It is important because MSMEs are offered many types of government incentives, subsidies and priority sector lending. So, to verify eligibility of an organization as MSME, accounting system should be sufficiently effective and transparent (Reserve Bank of India, 2023). Moreover, systematic accounting system strengthens internal control mechanisms, fraud prevention, budgeting and long-term strategic planning. Research suggested that MSMEs, who have adopted structured accounting information systems, demonstrated improved operational efficiency and survival rates compared to those who relied on informal bookkeeping (OECD, 2018; World Bank, 2020). Therefore, accounting is not only a compliance tool but a strategic instrument.

Emergence of AI technologies in business processes

The emergence of AI technologies is continuously and significantly evolving business processes across organizations of all sizes, including Micro, Small and Medium Enterprises (MSMEs). AI means the computer systems that are capable to perform tasks which traditionally require human intelligence like learning, reasoning, solution finding and decision making. Among the most influential technologies that drive this transformation, one is Machine Learning (ML). ML is the technique which enables systems to analyze large datasets through which it identifies patterns and improves predictions over the time without explicit programming. Another technology is closely related to machine learning is Deep Learning. DL is like a subset of former one (ML) that uses neural networks to process complex data such as images, speech and financial transactions. Another major technique is Natural Language Processing (NLP). NLP is a technique through which machines become capable to catch and interpret the human language. Thereby it helps to enhance customer service through chatbots and automated communication systems. Additionally, Robotic Process Automation (RPA) is developed as a tool for automating the repetitive and path defined tasks like invoice generating, roll preparing and compliance reporting.

Research indicates that AI-driven technologies enhance operational efficiency, reduce transactional costs and improve decision accuracy in a business environment (Brynjolfsson & McAfee, 2017). The



Organization for Economic Co-operation and Development (2019) notes that AI adoption strengthens productivity and competitiveness, particularly in data-intensive sectors such as finance, manufacturing and retail etc. The World Bank (2021) highlights these digital technologies as the critical enablers of innovation and financial inclusion for small enterprises in developing economies.

In the Indian context, AI integration into business processes can be seen through accounting automation, predictive analytics, fraud detection, optimization of supply chain and customer relationship management. For MSMEs, AI technologies support to make better financial planning. Thus, the incorporation of AI technologies shows a paradigm shift in business process management, fostering efficiency, transparency and sustainable growth.

LITERATURE REVIEW

Accounting practices in MSMEs are generally taken as simplified bookkeeping systems. Empirical research suggests that many MSMEs, especially in developing economies, rely on manual record-keeping or basic spreadsheets. The main reason behind this is to control cost and limited accounting expertise (Mitchell et al., 2000). These practices frequently emphasize cash flow tracking and tax compliance rather than the strategic financial planning. According to World Bank (2020), weak financial reporting systems reduce transparency and hinder MSMEs' access to formal finance and whole sum it affects growth and sustainability. A major challenge in MSME accounting relates to manual processes, which increase the likelihood of record errors, data omissions and reconciliation problems etc. Studies have found that informal accounting systems negatively affect the quality of financial information (Ismail & King, 2007). Compliance complexity further compounds these issues. Regulatory requirements, tax reporting standards and statutory audit norms create extra administrative burdens due to which small firms generally struggle to manage. The Organization for Economic Co-operation and Development (2018) noted that regulatory compliance costs disproportionately affect smaller firms and due to this productivity gets interrupt.

They focused on adoption of accounting software and accounting information systems (AIS) to overcome these challenges. Research indicates that the implementation of computerized accounting systems improves reporting accuracy in SMEs (Grande et al., 2011). Similarly, cloud-based accounting solutions enhanced real-time financial visibility and simultaneously reduced operational costs (Dimitriu & Matei, 2015). However, adoption remains uneven due to technological readiness, financial constraints, lack of knowledge and skill gaps. Overall, strengthening accounting practices through digital transformation is essential for the improvement of MSME financial feasibility.

Digital transformation means the integration of digital techs into business processes. It is must to enhance efficiency and to survive in this competitive phenomenon. It involves restructuring



organizational models, workflows and customer engagement strategies through digital tools. It involves cloud computing, big data analytics, automation platforms etc. (Vial, 2019). In contrast, AI represents a subset of digital transformation that focuses specifically on the systems that are capable to act as human intelligence. These things include learning, reasoning and problem solving. While digital transformation is a broader organizational shift, AI constitutes an advanced technological capability within that transformation (Verhoef et al., 2021). In the accounting domain, digital transformation may include electronic invoicing or cloud-based ERP systems, whereas AI involves intelligent automation, predictive analytics, cognitive analysis and decision support. Thus, AI acts as an enabling force within the broader digital transformation agenda.

Several core AI technologies are reshaping accounting and business processes. Machine Learning (ML) enables predictive analytics, anomaly detection and financial forecasting through analyzing the historical datasets (Brynjolfsson & McAfee, 2017). RPA automates repetitive tasks like invoice processing, reconciliations and tax filings with reduced human error and operational costs (Kokina & Blanchette, 2019). Natural Language Processing (NLP) supports document analysis and chatbot-based client communication. Additionally, Expert Systems, one of the earliest AI applications in accounting, replicate professional judgment through rule-based logic frameworks. This also assists in auditing and tax advisory functions (Sutton et al., 2016). Collectively, these technologies enhance efficiency, accuracy, reliability, time saving and decision-making quality in financial management.

Scholarly interest in Artificial Intelligence (AI) within accounting has expanded considerably over the past decade. Early conceptual reviews emphasized the transformative potential of intelligent systems in auditing and decision support. For instance, Sutton et al. (2016) examined the historical evolution of AI in accounting research and found that expert systems and rule-based models initially dominate the field. This was observed especially in audit judgment and fraud detection. Their review highlighted how AI research transitioned from experimental prototypes to practical automation tools by integrating within accounting information systems. Subsequent reviews shifted focus toward automation and cognitive technologies in auditing. Kokina and Davenport (2017) discussed how machine learning and robotic process automation were reshaping audit procedures through automating routine tasks. They argued that AI would not replace accountants but would redefine their roles toward analytical and interpretative functions. More recent studies have adopted structured methodologies to map AI applications across financial reporting, taxation, auditing and management accounting. For example, Raimo et al. (2022) conducted a study identifying key research clusters like predictive analytics, fraud detection, blockchain integration and ethical concerns. Their findings indicate a strong concentration of studies in large firms and developed economies.

Additionally, several bibliometric analyses have examined publication trends, collaboration networks



and thematic evolution in AI accounting research. They reveal the rapid growth with a dominant emphasis on audit analytics and financial forecasting (Baldwin et al., 2006). However, despite comprehensive coverage of technologies and professional implications, these reviews largely focus on corporate or public accounting environments. Limited attentions have been given to these unique operational, financial and technological constraints faced by MSMEs. While existing reviews provide strong theoretical foundations, still a focused systematic review addressing AI adoption specifically within MSME accounting contexts remains underdeveloped.

Despite growing scholarly attention, existing review studies largely concentrate on large corporations. There a noticeable lack remains of comprehensive systematic reviews which has specifically examined the AI adoption within MSMEs. Even if MSMEs operate under resource constraints, limited digital literacy and distinct regulatory pressures at many places, the drivers, barriers and outcomes of AI adoption may significantly differ from larger firms. Moreover, prior research often overlooks developing economies, where MSMEs form the backbone of economic activity. Therefore, a systematic review focused exclusively on AI integration in MSME accounting is both timely and necessary to bridge this theoretical and empirical gap.

RESEARCH METHODOLOGY

A comprehensive literature review is conducted through major academic databases including *Scopus*, *Web of Science*, *ScienceDirect*, *Emerald Insight*, *Wiley Online Library*, *SpringerLink* and *Taylor & Francis Online*. The search covered publications from 2000 to 2025 to capture early developments in accounting information systems and recent advancements in artificial intelligence and digital transformation.

The initial search resulted in 416 records across databases. After removal of duplicate records (n = 104), a total of 312 articles remained for title and abstract screening.

The following keyword combinations were used then:

- “Artificial Intelligence” AND “Accounting”.
- “Expert system” AND “SMEs”.
- “Digital transformation” AND “MSMEs”.
- “Big data analytics” AND “Audit”.
- “RPA” AND “Accounting professionals”.
- “Machine learning” AND “Financial reporting”.

So, during screening, 150 articles were excluded due to:

- Irrelevance to accounting context.
- Purely technical AI without business linkage.
- Large enterprise focus without SME relevance.

- Non-peer-reviewed sources.

Then, full-text articles (n = 162) were assessed against stricter inclusion criteria:

Inclusion Criteria:

1. Direct discussion of AI, automation or digital technologies in accounting.
2. Empirical or conceptual relevance to SMEs/MSMEs.
3. Discussion of impact on accounting professionals.
4. Published in reputable peer-reviewed journals.

Exclusion Criteria:

1. Non-accessible full texts.
2. Industry reports without academic rigor.
3. Studies focusing exclusively on non-accounting domains.

After eligibility assessment, 109 articles were excluded due to insufficient relevance to MSMEs or lack of accounting specific implications.

Thus, a final sample of 53 high quality peer-reviewed studies was included in the systematic review.

RESULT AND DISCUSSION

1. Overview of Selected Studies

Table 2: Systematic Literature Review Summary of Selected Articles/Papers

S.N .	Authors [Country]	Year	Objectives	Tool/Methods used	Key Finding
1	O’Leary [United States]	2000	Analyze ERP systems, their life cycle, role in e-commerce and associated risks.	Conceptual analysis; ERP lifecycle framework; case-based insights	ERP systems improve information integration and decision-making but involve implementation complexity and risk.
2	Brynjolfsson & Hitt [United States]	2000	Analyze the impact of information technology on organizational transformation and business performance.	Empirical analysis using firm-level data; econometric modeling	IT investment significantly improves productivity and performance when combined with organizational changes.

3	Bharadwaj [United States]	2000	Examine IT capability and firm performance.	Empirical; RBV framework	IT capability enhances competitive advantage.
4	Abdolmohammadi & Usoff [United States]	2001	Examine decision aids in auditing.	Longitudinal; experimental study	Decision aids improve audit performance.
5	O’Leary [United States]	2002	Study knowledge management systems (KPMG).	Case study	Enhances knowledge sharing and decision-making.
6	Vasarhelyi & Hoitash [United States]	2003	Explore intelligent agents in accounting.	Conceptual analysis	Enables real-time monitoring.
7	Cerullo & Cerullo [United States]	2004	Study AI in accounting and business.	Conceptual analysis	AI improves efficiency and decision-making.
8	Borthick, Bowen & Hall [United States]	2005	Analyze AIS documentation impact.	Experimental study	Documentation improves system quality.
9	Baldwin, Brown & Lynch [United States]	2006	Analyze AI research controls.	Meta-analysis	Fuzzy logic effectively handles the “gray areas” of materiality and audit risk assessment.
10	Arnold, Sutton & Hunton [United States]	2006	Study AI impact on decision-making.	Experimental study	AI system mitigates the experience gap in junior accountants.
11	Wu, Ong & Hsu [Taiwan]	2008	Improve MSME credit rating accuracy.	Hybrid AI models	Hybrid AI models significantly improve the

					accuracy of credit rating for MSMEs.
12	Sangster, Leech & Coalson [United Kingdom]	2009	Study ERP impact on accountants.	Case study	AI modules shift the accountant's role from data entry to "data scientist" early on.
13	Oliveira & Martins [Portugal]	2011	Review IT adoption models.	Literature review	Organizational readiness critical.
14	Granlund [Finland]	2011	Extend AIS to management accounting.	Conceptual analysis	IT impacts management accounting.
15	Yigitbasioglu & Velcu [Australia]	2012	Examine BI adoption impact.	Empirical analysis	BI adoption improves control.
16	Bharadwaj et al. [United States]	2013	Study digital business strategy.	Conceptual framework	Digital transformation is strategic necessity.
17	Westerman et al. [United States]	2014	Study digital transformation leadership.	Case study; survey	Digital maturity boosts performance.
18	Brynjolfsson & McAfee [United States]	2014	Examine digital tech impact.	Conceptual analysis	Digital tech alters workforce structure.
19	Tarute & Gatautis [Lithuania]	2014	Study ICT impact on SMEs.	Empirical study	ICT improves competitiveness.
20	Nguyen et al. [Vietnam]	2015	Study IT adoption in SMEs.	Empirical study	IT capability improves SME performance.
21	Vasarhelyi, Kogan & Tuttle	2015	Study big data in accounting.	Conceptual analysis	Automation enhances assurance.

	[United States]				
22	Awa, Ojiabo & Emecheta [Nigeria]	2015	Develop SME adoption framework.	Empirical; TAM-TOE	SME adoption driven by TOE factors.
23	Sutton, Holt & Arnold [United States]	2016	Review AI in accounting.	Literature review	AI transforms audit & decision processes.
24	Issa, Sun & Vasarhelyi [United States]	2016	Propose AI research ideas.	Conceptual framework	Big data enhances audit quality.
25	Kokina & Davenport [United States]	2017	Study AI in auditing.	Conceptual analysis	RPA automates routine accounting.
26	Appelbaum, Kogan & Vasarhelyi [United States]	2017	Study big data in auditing.	Conceptual framework	Data analytics improves fraud detection.
27	Al-Htaybat & von Alberti-Alhtaybat [Jordan & Middle East]	2017	Study big data in reporting.	Conceptual analysis	Data-driven reporting increasing.
28	Frey & Osborne [United Kingdom]	2017	Study job automation risk.	Econometric model	Accounting roles partly automatable.
29	Scuotto et al. [Italy]	2017	Study digital innovation in SMEs.	Empirical study	Innovation performance increases.
30	Nambisan	2017	Study digital entrepreneurship.	Conceptual framework	Digital platforms transform value creation.

	[United States]				
31	Kokina, Mancha & Pachamanova [United States]	2017	Study fraud analytics.	Empirical analysis	Analytics enhances fraud risk detection.
32	Appelbaum et al. [United States]	2018	Study audit analytics.	Literature review	Audit analytics evolving.
33	Davenport & Ronanki [United States]	2018	Study AI applications.	Case study	Firms adopt AI for efficiency.
34	Jarrahi [United States]	2018	Study AI & work.	Conceptual analysis	AI augments professionals.
35	Cockburn, Henderson & Stern [United States]	2018	Study AI & innovation.	Conceptual analysis	AI reshapes business strategy.
36	Rikhardsson & Yigitbasioglu [Iceland]	2018	Study BI in accounting.	Literature review	Business intelligence improves SME performance.
37	Ghasemaghaei [Canada]	2018	Study big data performance.	Empirical study	Analytics capability improves decisions.
38	Moll & Yigitbasioglu [Australia]	2019	Study digital accounting roles.	Literature review	Digitalization reshapes accounting roles.
39	Bouwman et al.	2019	Study SME digitalization.	Empirical study	Digitalization improves SME growth.

	[Netherlands]				
40	Vial [France]	2019	Study digital transformation.	Literature review	Defines digital transformation.
41	Warner & Wager Germany	2019	Study dynamic capabilities.	Conceptual analysis	Dynamic capabilities essential.
42	Ransbotham et al. [United States]	2020	Study AI maturity.	Survey study	AI maturity linked to performance.
43	Dwivedi et al. [United Kingdom]	2021	Study AI challenges.	Literature review	AI adoption framework proposed.
44	Verhoef et al. [Netherlands]	2021	Study digital transformation.	Conceptual framework	Digital transformation multidisciplinary.
45	Chatterjee et al. [India]	2021	Study AI adoption.	Empirical; TAM-TOE	Leadership affects AI adoption.
46	Dubey et al. [India]	2022	Study AI & analytics.	Empirical; SEM	AI improves operational performance.
47	Rawashdeh, Bakhit & Abaalkhail [Jordan]	2023	Study AI adoption in SMEs.	Empirical; SEM	Desire to save time and increase efficiency but smaller firms face barrier.
48	Lim, T. K., & Seng, L. W. [Malaysia]	2024	Study AI adoption factors.	Empirical study	Many internal & external positive pressure influence AI adoption in accounting practices.
49	Usman, M., & Harto, P [Indonesia]	2024	Study AI in MSMEs.	Literature review	Improve operational efficiency, decision-making quality and product/service innovations.

50	Eswaraiyah B. [India]	2025	Study AI in MSMEs accounting.	Conceptual/survey	Practical adoption lags due to resource limitations and skills gaps.
51	Rahmani, S. et al. [Indonesia]	2025	Study AI in SMEs.	Empirical study	Highlighted need for targeted policies and frameworks to accelerate AI adoption.
52	Alruwaili & Mgammal [Saudi Arabia]	2025	Study AI in accounting.	Conceptual/survey	High implementation cost & lack of digital skills.
53	Jamal et al. [Pakistan]	2025	Study AI adoption in MSMEs.	Empirical study	Currently less than 10% of MSMEs use advance AI.

2. Evolutionary Phase of AI and Digitalization in Accounting

The literature provided through *Table 2* clearly reveals evolution of technological trends in accounting and MSMEs over time. In the *early phase [2000-2010]*, researches were primarily focused on rule based and foundational AI technologies like expert systems, artificial neural network and fuzzy logic etc. These technologies were mainly applied for better audit engagement and fraud detection. During this period, the main emphasis was on enhancing the accuracy.

The *intermediate phase [2011-2016]*, the focus shifted toward wide and integrated technologies like Enterprise Resource Planning, Accounting information systems, Business intelligent (BI) and cloud accounting. These technologies incorporate better data integration and real time progress access. During this time, research highlighted the importance of IT capabilities and system alignment in achieving performance gains.

In the *recent phase [2017 onwards]*, there is a significant transition towards advanced and intelligent digital technologies like Artificial Intelligence, Big data analytics, Neural Networks and Robotic process automation etc. These technologies enable automation of routine accounting tasks, enhance predictive analytics, improve audit quality and support strategic decision making. Moreover, they convert the role of accountants from traditional record keepers to analytical and strategic professionals. Overall, the technological trend demonstrates a shift from basic automation to intelligent and data driven system.

3. Thematic Classification of Research

Based on contextual analysis, the 53 studies can be grouped into five dominant thematic clusters:

i. AI in Auditing and Assurance:

Studies such as Issa et al. (2016), Appelbaum et al. (2017, 2018) and Kokina et al. (2017) demonstrate that data analytics and AI-driven audit tools enhance fraud detection, risk assessment and continuous auditing efficiency. Early research (Abdolmohammadi & Usoff, 2001; Baldwin et al., 2006) emphasized decision aids and fuzzy systems, while recent works highlight big data-driven audit analytics. Audit remains the most technologically advanced accounting domain in AI adoption.

ii. Digital transformation and Strategic Capability:

Research by Bharadwaj (2000), Bharadwaj et al. (2013), Westerman et al. (2014), Vial (2019), Warner & Wager (2019) and Verhoef et al. (2021) conceptualizes digital transformation as a strategic renewal process. These studies show that digital capability is not merely operational but a driver of competitive advantage. AI adoption in accounting must be viewed within broader digital transformation capability frameworks.

iii. AI and Digital adoption in SMEs/MSMEs:

A substantial portion of studies focus directly on SMEs (Oliveira & Martins, 2011; Awa et al., 2015; Chatterjee et al., 2021). These studies identify below points as critical determinants of AI adoption:

- Technological readiness.
- Leadership commitment.
- TOE (Technology-Organization-Environment) factors.
- Digital capability maturity.

MSMEs face structural and capability constraints. AI adoption is conditional rather than automatic.

iv. Impact on Accounting Professional

Studies by Brynjolfsson & McAfee (2014), Frey & Osborne (2017), Jarrahi (2018) and Moll & Yigitbasioglu (2019) explore workforce implications. Findings indicate that AI:

- Automates routine bookkeeping.
- Reduces manual data entry.
- Shifts roles toward analytical and advisory functions.

However, full professional displacement is unlikely; augmentation is more probable because the accountant's role evolves from "record keeper" to "data interpreter and strategic advisor".

v. Performance and Competitive Outcomes



Empirical studies (Nguyen et al., 2015; Rikhardsson & Yigitbasioglu, 2018; Bouwman et al., 2019; Dubey et al., 2022) consistently demonstrate positive associations between digital capability and firm performance. AI adoption improves operational efficiency, decision quality and competitiveness, especially in digitally mature SMEs.

4. Dominant Technologies Identified:

Across the 53 studies, the most frequently observed technologies include:

- Expert systems (early phase)
- Artificial neural networks (bankruptcy prediction)
- Fuzzy logic systems
- Business intelligence systems
- Big data analytics
- Robotic Process Automation (RPA)
- Cloud accounting
- Continuous auditing platforms
- AI adoption frameworks

Notably, Machine Learning (ML) and advanced predictive analytics appear more prominently in post-2016 literature.

5. Demographic Classification:

This research spans from 2000 to 2025. The research was initially dominated by the United States Corporate Accounting studies but gradually it expanded. From 2010 Europe, Asia and Australia come with the recent studies specially from 2021 to 2025. These are focused on MSMEs in developing economies. They highlight the AI adoption, efficiency and automation in smaller firms. Overall, there is a clear shift of research from large corporate holding companies to small business holding companies, like from United States to African countries.

The literature collectively indicates a paradigm shift from isolated AI tools toward integrated digital transformation ecosystems. While AI significantly enhances audit quality, operational efficiency and SME competitiveness, its adoption in MSME accounting remains dependent on capacity or capability basis. One more important point is that the professional accountant is not displaced but repositioned within a data centric advisory role.

CONCLUSION & FUTURE RESEARCH

This systematic review 53 studies are analyzed on Artificial Intelligence adoption in Micro, Small and Medium Enterprises' accounting. This review highlights trends, applications, benefits and challenges



in the adoption of these technologies. AI technologies like Machine Learning, Robotic Process Automation, Cloud Accounting and Expert System are reshaping the book keeping, auditing, fraud detection, tax compliance and financial forecasting by improving efficiency and accuracy. However, adoption remains uneven due to financial constraints, skill gaps, security concerns and limited resources especially in developing economies. Professional bodies and policy makers should collaborate to provide accessible, secure and scalable AI solution.

Future research in this context should focus on sector specified models. Cross country comparison and behavioral patterns & adoption can be found out and apart from these post implementation effects can be measured in various types of organizations.

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