

Artificial Intelligence Adoption in Managerial Accounting: Benefits, Challenges and Emerging Trends in Meerut Region

Vrinda Aggarwal

Research Scholar

School of Commerce and Management

Mahaveer University

Meerut

Email: cavrindaaggarwal@gmail.com

Dr Palak Kapoor

Assistant Professor

School of Commerce and Management

Mahaveer University

Meerut

Abstract

Artificial Intelligence is gradually changing managerial accounting by improving accuracy, speed, and decision-making in organisations. This study examines the adoption of AI in managerial accounting, its benefits, challenges, and emerging trends in the Meerut region. The study is based on primary and secondary data collected from 125 respondents through a structured questionnaire. The findings show that AI helps in better financial reporting, cost control, and faster managerial decisions. Major benefits include improved accuracy and reduced manual work, while major challenges include high cost, limited technical skills, and lack of awareness. Overall, AI is gradually changing the role of managerial accountants and supporting modern accounting practices.

Keywords: *Artificial Intelligence, Accounting, Challenges, Financial, Benefits.*

Reference to this paper should be
made as follows:

Received: 08.04.26

Approved: 10.06.26

Vrinda Aggarwal

Dr Palak Kapoor

*Artificial Intelligence Adoption in
Managerial Accounting: Benefits,
Challenges and Emerging Trends
in Meerut Region*

Vol. XVII, No.1

Article No. 23,

Pg. 230-237

Similarity Check: 12%

Online available at

[https://anubooks.com/journal-
volume/jgv-vol-xvii-no1-jan-
june-2026](https://anubooks.com/journal-volume/jgv-vol-xvii-no1-jan-june-2026)

DOI: [https://doi.org/10.31995/
jgv.2026.v17i01.023](https://doi.org/10.31995/jgv.2026.v17i01.023)

**This article has been peer-reviewed by the Review Committee of JGV.*

Introduction

Artificial intelligence (AI) has emerged as one of the most influential technological developments affecting business operations across the world. Artificial Intelligence refers to the use of intelligent computer systems capable of performing tasks that normally require human thinking, such as learning from data, recognising patterns, making predictions, and supporting decisions. In the field of accounting, AI has introduced major changes by automating repetitive tasks, improving data processing speed, and enhancing the quality of financial information available to managers. Traditional accounting systems that relied heavily on manual recording and human judgment are gradually being replaced or supported by digital systems that can analyse large volumes of financial data quickly and accurately. This transformation has created new opportunities for organisations to improve efficiency and strengthen managerial decision-making.

Managerial accounting plays an important role in every organisation because it provides financial and non-financial information needed for planning, controlling, and decision-making. Unlike financial accounting, managerial accounting focuses mainly on internal management needs such as budgeting, cost analysis, performance evaluation, and forecasting. The adoption of AI in managerial accounting has changed how these activities are performed. AI-powered software can now generate reports automatically, detect unusual financial patterns, support cost control, and help managers make timely decisions. For example, intelligent systems can compare historical cost data, predict future expenses, and identify operational inefficiencies more quickly than traditional manual methods. As business competition increases, organisations are becoming more dependent on technology-driven accounting practices to remain efficient and competitive.

The growing adoption of digital technology in India has also influenced the accounting profession. Businesses across different sectors are increasingly investing in accounting software, cloud systems, and data analytics tools. Government initiatives promoting digitalisation, the expansion of internet connectivity, and the growth of technology-based business services have encouraged firms to modernise their financial operations. In many organisations, AI is no longer viewed only as a technical innovation but as a strategic resource that can improve accuracy and reduce operational costs. Large companies have already started integrating machine learning tools, automated dashboards, and predictive analysis into managerial accounting processes, while medium-sized enterprises are gradually moving in the same

direction. This shift has made AI adoption an important area of academic and practical study in the Indian business environment.

The Meerut region provides an important context for understanding how AI is being adopted at the local organisational level. Meerut is a growing commercial and industrial centre with businesses engaged in manufacturing, education, trading, services, and small-scale industries. As local businesses face increasing pressure to improve efficiency and compete in wider markets, many organisations have started adopting digital tools in their financial and managerial operations. However, the level of AI adoption in managerial accounting may vary depending on organisational size, financial resources, awareness, and technical capability. Some firms may use advanced accounting software with automated features, while others may still rely mainly on traditional accounting methods. Studying the Meerut region therefore helps in understanding how technological transformation is taking place beyond large metropolitan business centres.

The use of AI in managerial accounting offers several important benefits. One of the major advantages is improved accuracy, as automated systems reduce the possibility of human error in calculations, reporting, and data entry. AI also increases speed by completing repetitive tasks in less time, allowing accounting professionals to focus on analysis rather than routine processing. Another major benefit is better decision support, because AI tools can process large datasets and provide insights that help managers evaluate alternatives more effectively. Cost control is also improved through predictive analysis and monitoring systems that identify unnecessary expenses or inefficiencies. These benefits make AI highly relevant for organisations seeking better financial control and stronger managerial performance.

Despite these advantages, the adoption of AI also presents several challenges. Many organisations face difficulties related to high implementation costs, limited technical infrastructure, and a lack of skilled personnel. Small and medium-sized firms may hesitate to invest in advanced systems because of budget limitations or uncertainty about long-term returns. Employees may also resist technological change due to fear of job displacement or unfamiliarity with digital tools. Another challenge is data security, as financial systems require strong protection against unauthorised access and misuse. In some organisations, the absence of proper training reduces the effective use of AI even after adoption. These barriers indicate that technological change in accounting is not only a technical process but also an organisational and human challenge.

The increasing use of AI is also changing the professional role of managerial accountants. Earlier, managerial accountants were mainly responsible for preparing reports, maintaining records, and assisting with cost calculations. In the digital era, their role is expanding toward interpretation, strategic planning, and advisory support. Since many routine tasks are now automated, accountants are expected to understand technology, interpret analytical outputs, and contribute directly to business decisions. This requires new competencies such as digital literacy, analytical thinking, and familiarity with AI-enabled accounting systems. Therefore, AI does not eliminate the need for accountants; rather, it changes the nature of their work and increases the importance of higher-level professional skills.

Objective of the study

1. To examine the adoption of artificial intelligence in managerial accounting practices in the Meerut region.
2. To analyse the impact of AI on managerial decision-making and organisational performance.
3. To identify the benefits and challenges of AI adoption in managerial accounting.
4. To assess the changing role of managerial accountants in the digital era.
5. To explore emerging AI trends in managerial accounting in the Meerut region.

Review of Literature

Agrawal, Rathod, Suthar, and Marvadi (2025) conducted a bibliometric analysis of artificial intelligence research in the accounting domain, highlighting a significant increase in academic interest in AI-driven accounting systems. The study revealed that AI applications in accounting focus primarily on automation, predictive analysis, fraud detection, and decision support. The authors emphasised that Indian accounting research is gradually shifting towards technology-oriented studies, reflecting industry adoption trends.

Pargi (2025) explored the role of artificial intelligence in modernising accounting practices in India. The study highlighted the use of AI in budgeting, cost management, variance analysis, and strategic planning. According to the author, AI enables managerial accountants to move beyond routine tasks and focus on strategic analysis and advisory roles. The research emphasised that AI adoption enhances decision quality and organisational agility.

Solanki and Shah (2025) examined the opportunities, challenges, and future directions of AI applications in accounting. The study concluded that AI improves

managerial accounting functions such as cost control, budgeting, and decision-making. However, issues such as data privacy, ethical concerns, and dependence on technology pose significant risks. The authors stressed the need for regulatory frameworks and skill development to ensure sustainable adoption.

Choudhary, Lagade, and More (2024) analysed the evolution of artificial intelligence in the Indian accounting and finance sector. Their findings suggested that AI applications such as RPA and machine learning significantly improve internal reporting, forecasting, and performance measurement. The study also noted that while large organisations are rapidly adopting AI, SMEs face challenges related to cost and infrastructure.

Singh and Vardia (2024) examined the impact of artificial intelligence on the accounting profession in small-scale industries in Rajasthan. Their study found that AI tools significantly improve efficiency, accuracy, and speed in accounting operations. The research also highlighted that managerial accountant are increasingly required to develop analytical and technological skills to effectively utilise AI-based systems. However, the study identified resistance to change and lack of technical training as major barriers.

Research Methodology

Research Design:

The study is based on a descriptive and analytical research design to examine AI adoption in managerial accounting practices, its benefits, challenges, and emerging trends in the Meerut region.

Sample Size:

The study includes 125 respondents from the Meerut region, selected from accountants, finance managers, business owners, and professionals related to accounting and finance.

Data Collection:

Both primary and secondary data are used. Primary data are collected through a structured questionnaire distributed among respondents. Secondary data are collected from journals, books, research articles, and online sources related to AI and managerial accounting.

Method of Analysis:

Collected data are analysed using percentage analysis, mean, standard deviation, and simple statistical tools. Tables and charts are used for clear interpretation of results.

Data Analysis and Interpretation

Demographic profile of the respondents

Table 1: Gender of the respondents

Particular	Frequency	Percentage
Male	86	68.8%
Female	39	31.2%
Total	125	100%

The table presents the gender-wise distribution of respondents included in the study conducted in the Meerut region. Out of the total 125 respondents, 86 respondents (68.8%) are male, while 39 respondents (31.2%) are female. This shows that male respondents form the majority of the sample selected for the study. The higher participation of male respondents indicates that a larger proportion of professionals involved in managerial accounting and related organisational activities in the selected sample are male. However, the participation of female respondents also reflects that women are actively contributing to accounting and finance-related functions in organisations. The inclusion of both genders provides balanced insights for understanding views related to Artificial Intelligence adoption in managerial accounting practices.

Table 2: Level of AI Adoption in Managerial Accounting Practices in Meerut Region

Response Category	Number of Respondents	Percentage (%)
Highly Adopted	35	28%
Moderately Adopted	52	41.6%
Low Adoption	25	20%
Not Adopted	13	10.4%
Total	125	100%

The table shows that 41.6% of respondents reported moderate adoption of AI in managerial accounting practices, indicating that many organisations in the Meerut region are gradually integrating AI tools into accounting functions. 28% of respondents stated high adoption, reflecting growing acceptance of automation and intelligent systems in budgeting, reporting, and financial analysis. However, 20% reported low adoption and 10.4% indicated no adoption, suggesting that limited awareness, infrastructure constraints, and skill gaps still restrict wider implementation of AI in some organisations.

Table 3: Perceived Benefits of AI Adoption in Managerial Accounting

Benefit Identified	Number of Respondents	Percentage (%)
Improved Accuracy	40	32%
Faster Decision-Making	33	26.4%
Cost Reduction	28	22.4%
Better Data Management	24	19.2%
Total	125	100%

The table indicates that 32% of respondents identified improved accuracy as the major benefit of AI adoption, showing that AI helps reduce human error in managerial accounting tasks. 26.4% highlighted faster decision-making, suggesting that AI-generated reports and predictive insights support quicker managerial responses. 22.4% reported cost reduction, while 19.2% emphasised better data management, demonstrating that AI contributes to operational efficiency and improved handling of financial information in organisations across the Meerut region.

Conclusion

The study concludes that artificial intelligence is gradually transforming managerial accounting practices in the Meerut region by improving efficiency, accuracy, and speed in accounting-related activities. Organisations are increasingly using AI tools for better financial reporting, budgeting, and managerial decision-making. AI provides important benefits such as reduced manual work, improved data management, and faster access to financial information. However, challenges like high implementation cost, limited technical skills, and lack of awareness still affect its wider adoption. Overall, the role of managerial accountants is changing from routine record-keeping to analytical and decision-support functions, showing that AI will continue to play an important role in the future of managerial accounting.

References

1. Agrawal, S., Rathod, D. S., Suthar, D. D., & Marvadi, D. C. (2025). Artificial intelligence and accounting research: A bibliometric analysis. *Indian Journal of Accounting*, 57(1), Pg. 96–124.
2. Budiherwanto, I. (2025). The influence of artificial intelligence and the technology acceptance model on sustainable financial governance. *Jurnal Ilmiah Manajemen Kesatuan*, 13(3), Pg. 1791–1802.
3. Choudhary, D. M., Lagade, N., & More, K. S. (2024). The impact and evolution of artificial intelligence in the Indian accounting and finance sector. *International Journal of Innovation in Engineering Research and Management*, 11(4), Pg. 47–53.

4. Choukir, J. (2025). Leadership and job demand on managerial decision-making effectiveness through emotional exhaustion in the aviation industry. *Qubahan Academic Journal*, 5(4), Pg. **227–243**.
5. Flavián, C., Pérez-Rueda, A., Belanche, D., & Casaló, L. V. (2022). Intention to use analytical artificial intelligence (AI) in services: The effect of technology readiness and awareness. *Journal of Service Management*, 33(2), Pg. **293–320**.
6. Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). Evaluation of the structural model. In *Partial Least Squares Structural Equation Modeling (PLS-SEM) using R*. Springer.
7. Kovari, A. (2024). AI for decision support: Balancing accuracy, transparency, and trust across sectors. *Information*, 15(11), 725.
8. Manel, H. A., Sania, W., Fadhillah, N., & Mahmud, A. (2023). Implementasi artificial intelligence dalam sistem informasi akuntansi dan manajemen. *Jurnal Akuntansi Bisnis Dan Ekonomi*, 9(2), **3460–3467**.
9. Maria, S., Alka'awneh, N., Abdul-Halim, H., Hasliza, N., & Saad, M. (2025). A review of diffusion of innovations theory (DOI) and technology, organization, and environment framework (TOE) in the adoption of artificial intelligence. *International Journal of Academic Research in Business and Social Sciences*, 15(3), Pg. **2118–2129**.
10. Mikalef, P., Krogstie, J., Pappas, I. O., & Pavlou, P. (2020). Exploring the relationship between big data analytics capability and competitive performance: The mediating roles of dynamic and operational capabilities. *Information & Management*, 57(2), 103169.
11. Papagiannidis, E., Mikalef, P., & Conboy, K. (2025). Responsible artificial intelligence governance: A review and research framework. *The Journal of Strategic Information Systems*, 34(2), 101885.
12. Pargi, P. B. (2025). Transforming Indian accounting: The role of artificial intelligence in modernizing practices. **International Educational Journal of Science and Engineering*.
13. Singh, H., & Vardia, S. (2024). A study on the impact of artificial intelligence on the accounting profession: Small-scale industries of Rajasthan. *Indian Journal of Accounting*, 56(1), Pg. **96–108**.
14. Solanki, D., & Shah, N. (2025). Artificial intelligence applications in accounting: Opportunities, challenges, and future directions. **International Education and Research Journal*.