



Impact of AI-Driven Accounting and Auditing on Efficiency in Indian Firms – A Study

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Abstract

Artificial Intelligence (AI) is rapidly transforming accounting and auditing practices across the globe, including in India. This study examines how AI-driven technologies such as machine learning, robotic process automation (RPA), and data analytics improve efficiency in Indian firms. The research highlights key benefits like automation of repetitive tasks, enhanced accuracy, real-time auditing, and better decision-making. At the same time, it discusses challenges such as skill gaps, data security concerns, and implementation costs. The study concludes that AI significantly improves efficiency but works best when combined with human expertise.

1. Introduction

The accounting and auditing profession in India is undergoing a major transformation due to technological advancements. Traditionally, accounting tasks were manual, time-consuming, and prone to errors. With the introduction of AI, firms are now able to automate processes, analyze large datasets, and improve financial reporting.

AI technologies such as:

Machine Learning (ML)

Natural Language Processing (NLP)

Robotic Process Automation (RPA)

are increasingly being adopted in Indian firms to improve operational efficiency and audit quality.

2. Objectives of the Study

- **Analyze AI Impact on Efficiency & Accuracy:** To evaluate how AI-powered tools enhance speed and reduce human error in accounting processes like data entry, reconciliation, and financial reporting.
- **Evaluate AI in Auditing Processes:** To examine how machine learning (ML) improves auditing, specifically in risk assessment, anomaly detection (fraud detection), and improving the reliability of financial reports.
- **Identify Adoption Challenges in India:** To investigate the barriers to adopting AI in Indian firms, including data security concerns, high implementation costs, and the need for new skill sets.
- **Assess Impact on Professional Roles:** To explore how AI shifts the accountant and auditor's role from traditional tasks toward more analytical, strategic, and advisory capacities.
- **Study Current Adoption Levels:** To analyze the extent of AI awareness and adoption within Indian firms, particularly in the MSME sector, as indicated in.

3. Literature Review

Recent studies show that AI has a strong positive impact on accounting efficiency. Research indicates that AI:

- Automates repetitive financial tasks
- Enhances accuracy and reduces human error
- Improves audit effectiveness and transparency.

In the Indian context, AI tools help streamline auditing processes and enable continuous auditing while reducing risk.

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Additionally, AI-driven systems provide deep insights and help firms remain competitive by saving time and improving decision-making.

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4. AI Applications in Accounting and Auditing

4.1 Automation of Routine Tasks

- AI automates tasks such as:
- Data entry
- Invoice processing
- Account reconciliation

This reduces manual workload and increases speed.

4.2 Data Analysis and Forecasting

- AI can analyze large volumes of financial data quickly, helping firms:
- Detect trends
- Predict risks
- Make informed decisions

4.3 Fraud Detection

AI systems identify unusual patterns and detect fraud more effectively than traditional methods.

4.4 Continuous Auditing

AI enables real-time auditing instead of periodic checks, improving transparency and efficiency.

5. Impact on Efficiency in Indian Firms

5.1 Increased Productivity

AI reduces time spent on repetitive tasks, allowing professionals to focus on strategic work.

5.2 Improved Accuracy

Automation minimizes human errors, leading to more reliable financial statements.

5.3 Cost Reduction

Firms save costs by reducing manpower requirements and improving process efficiency.

5.4 Faster Decision-Making

Real-time data analysis helps management make quicker and better decisions.

6. Challenges of AI Implementation

- Despite its benefits, AI adoption in India faces several challenges:
- Lack of skilled professionals
- High implementation cost
- Data privacy and security issues
- Resistance to change
- Regulatory uncertainties

Studies highlight that infrastructure and technical skill gaps are major barriers in the Indian environment.theaspd.com

7. Discussion

AI is not replacing accountants but transforming their roles. Professionals are shifting from routine bookkeeping to:

- Advisory roles
- Strategic decision-making
- Risk analysis

AI acts as a supportive tool, enhancing human capabilities rather than replacing them.

8. Conclusion

AI-driven accounting and auditing significantly improve efficiency in Indian firms by automating processes, enhancing accuracy, and enabling real-time insights. However, successful implementation requires addressing challenges such as skill development and data security. The future of accounting lies in a balanced integration of AI and human expertise.

9. Suggestions

- Provide AI training to accounting professionals
- Strengthen data security systems
- Encourage government support and policies
- Invest in affordable AI tools for small firms

10. References

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