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**IMPACT OF ARTIFICIAL INTELLIGENCE ON ACCOUNTING****Dr. Mohan Ram Naik<sup>1</sup>**DOI: <http://doi.org/10.5281/zenodo.21114021>**Review: 05/06/2026****Acceptance: 11/06/2026****Publication: 02/07/2026**

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**Abstract**

Artificial Intelligence (AI) is transforming the accounting profession by automating routine tasks, improving accuracy, enhancing decision-making, and increasing operational efficiency. AI-powered technologies such as machine learning, robotic process automation (RPA), natural language processing (NLP), and predictive analytics are revolutionizing traditional accounting practices. This paper examines the impact of AI on accounting, its benefits, challenges, and future prospects. The study highlights how AI is reshaping the role of accountants from data processors to strategic business advisors.

**Keywords:** Artificial Intelligence, Accounting, Automation, Machine Learning, Financial Reporting, Auditing.

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**Introduction**

The accounting profession has undergone significant changes due to technological advancements. Artificial Intelligence refers to computer systems capable of performing tasks that normally require human intelligence, such as learning, reasoning, problem-solving, and decision-making. AI technologies are increasingly being integrated into accounting functions, enabling organizations to streamline operations and improve financial management. As businesses generate large volumes of financial data, AI helps accountants analyze information quickly and accurately. This technological transformation is creating new opportunities while also presenting challenges for accounting professionals.

**Objectives of the Study**

1. To understand the concept of Artificial Intelligence in accounting.
2. To examine the applications of AI in accounting practices.
3. To analyze the benefits and challenges of AI adoption.
4. To explore the future impact of AI on the accounting profession.

**Research Methodology:** The study is descriptive and based on secondary data collected from:

- Academic journals
- Research papers
- Books on accounting and technology
- Industry reports
- Professional accounting publications

**Concept of Artificial Intelligence:** Artificial Intelligence refers to the simulation of human intelligence by machines. AI systems can learn from data, recognize patterns, make predictions, and perform tasks with minimal human intervention.

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<sup>1</sup>Associate Professor and head, Department of Commerce. Government First Grade College Ankola, Karnataka, India

## Major AI technologies used in accounting include:

- Machine Learning (ML)
- Robotic Process Automation (RPA)
- Natural Language Processing (NLP)
- Predictive Analytics
- Expert Systems

## Applications of AI in Accounting

### 1. Automated Bookkeeping

AI software can automatically record transactions, categorize expenses, and maintain accounting records with high accuracy.

### 2. Financial Reporting

AI helps generate financial statements and reports quickly, reducing manual effort and minimizing errors.

### 3. Auditing

AI-powered audit tools analyze large datasets, detect anomalies, and identify potential fraud more efficiently than traditional methods.

### 4. Tax Compliance

AI assists organizations in tax calculations, compliance monitoring, and preparation of tax returns.

### 5. Fraud Detection

Machine learning algorithms can identify suspicious transactions and unusual financial patterns, helping prevent fraud.

### 6. Forecasting and Decision-Making

AI analyses historical data to predict future trends, enabling better budgeting, forecasting, and strategic planning.

## Benefits of AI in Accounting

### Improved Accuracy

AI reduces human errors in calculations and data entry, improving the reliability of financial information.

### Increased Efficiency

Routine and repetitive tasks are automated, allowing accountants to focus on higher-value activities.

## **Cost Reduction**

Automation lowers operational costs and reduces the need for extensive manual processing.

## **Faster Processing**

AI can analyse large volumes of financial data within seconds, significantly improving productivity.

## **Better Decision-Making**

Advanced analytics provide valuable insights that support managerial decision-making.

## **Enhanced Fraud Detection**

AI systems continuously monitor transactions and identify irregularities in real time.

## **Challenges of AI in Accounting**

### **High Implementation Cost**

The adoption of AI technologies may require significant investment in software, infrastructure, and training.

### **Data Security Risks**

Organizations must ensure the protection of sensitive financial data from cyber threats.

### **Lack of Technical Skills**

Many accounting professionals require additional training to effectively use AI-based systems.

### **Dependence on Technology**

Excessive reliance on AI may create risks if systems fail or produce incorrect outputs.

### **Ethical and Regulatory Concerns**

Issues related to transparency, accountability, and compliance need careful consideration.

### **Impact on the Role of Accountants**

AI is not replacing accountants entirely; instead, it is changing their responsibilities. Future accountants will focus more on:

- Financial analysis
- Strategic planning
- Business advisory services
- Risk management

- Interpretation of AI-generated insights

Accountants who develop technological and analytical skills will remain highly valuable in the digital economy.

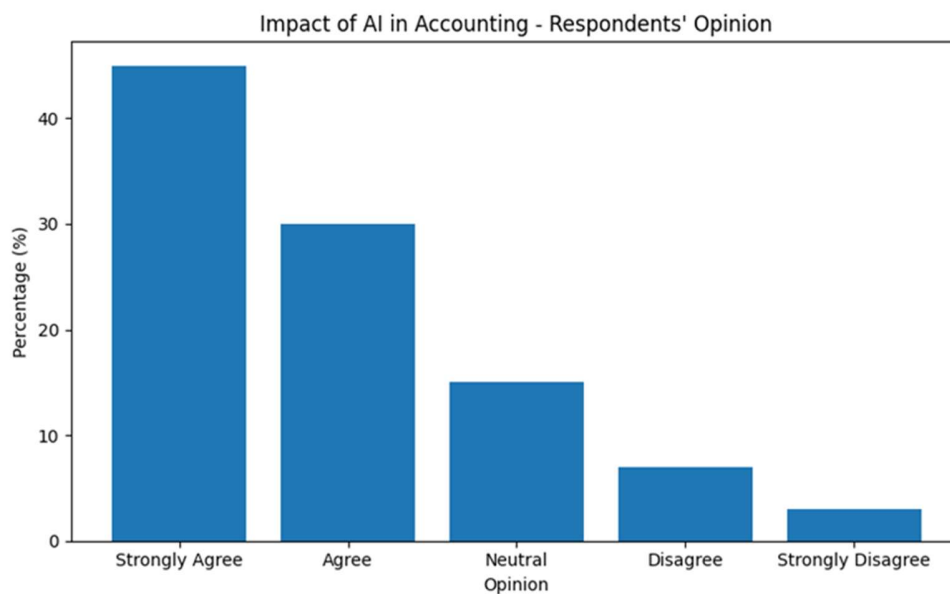
**Future Prospects**

The future of accounting is expected to be increasingly technology-driven. AI will continue to improve financial reporting, auditing, taxation, and business analytics. The integration of AI with cloud computing, blockchain, and big data analytics will further enhance the efficiency and effectiveness of accounting systems.

**DATA ANALYSIS AND INTERPRETATION**

**Table 1: Respondents' Opinion on the Impact of AI in Accounting**

<b>Opinion</b>	<b>Number of Respondents</b>	<b>Percentage (%)</b>
Strongly Agree	45	45
Agree	30	30
Neutral	15	15
Disagree	7	7
Strongly Disagree	3	3
<b>Total</b>	<b>100</b>	<b>100</b>

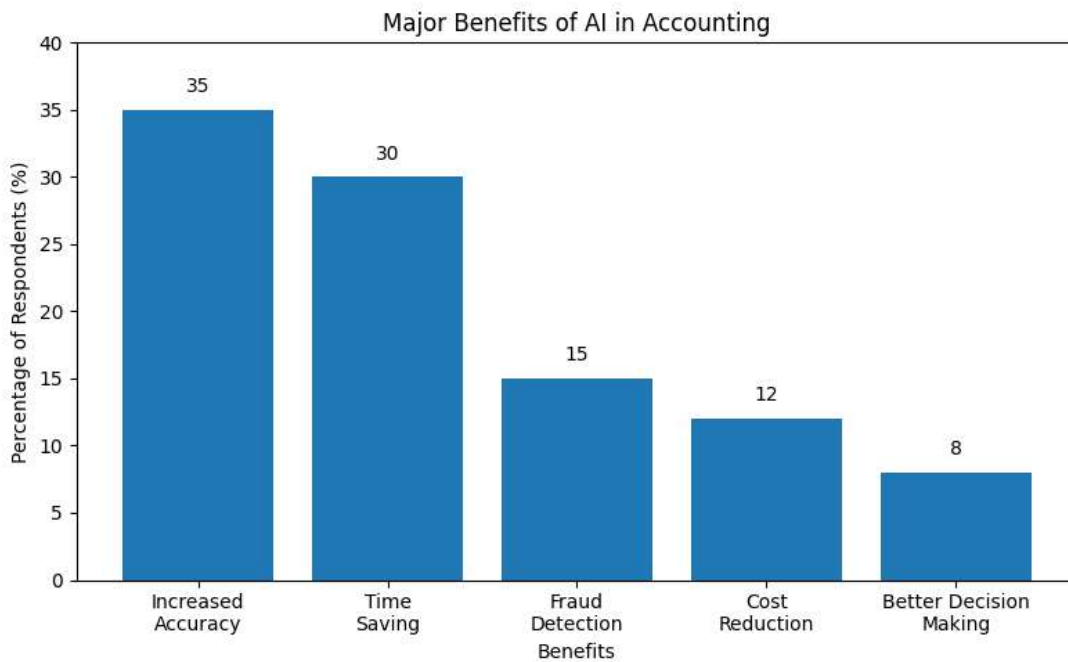


**Interpretation**

The table shows that 75% of respondents either strongly agree or agree that Artificial Intelligence positively impacts accounting practices. Only 10% disagree, indicating a favourable perception of AI adoption in accounting.

**Table 2: Major Benefits of AI in Accounting**

<b>Benefit</b>	<b>Respondents</b>	<b>Percentage (%)</b>
Increased Accuracy	35	35
Time Saving	30	30
Fraud Detection	15	15
Cost Reduction	12	12
Better Decision Making	8	8
<b>Total</b>	<b>100</b>	<b>100</b>



**Interpretation**

Increased accuracy (35%) and time-saving (30%) are perceived as the most important benefits of AI in accounting. This demonstrates the role of AI in enhancing operational efficiency.

**Table 3: Challenges in Implementing AI**

<b>Challenge</b>	<b>Respondents</b>	<b>Percentage (%)</b>
High Cost	32	32
Lack of Technical Skills	28	28
Data Security Concerns	25	25
Resistance to Change	10	10
Regulatory Issues	5	5
<b>Total</b>	<b>100</b>	<b>100</b>

### Challenges in Implementing AI

Percentage of respondents reporting different challenges in AI implementation.



### Interpretation

The major challenge faced by organizations is the high cost of implementation (32%), followed by a lack of technical skills (28%). This indicates the need for investment in training and infrastructure.

### Findings

1. AI significantly improves efficiency and accuracy in accounting operations.
2. Automated systems reduce routine manual work.
3. AI enhances fraud detection and risk management.
4. The role of accountants is shifting toward strategic and analytical functions.
5. Continuous learning and skill development are essential for accounting professionals.

### Suggestions

1. Provide AI training programs for accounting professionals.
2. Invest in cybersecurity measures.
3. Encourage gradual implementation of AI technologies.
4. Develop regulatory guidelines for AI-based accounting systems.
5. Promote awareness regarding the benefits of AI.

### Conclusion

Artificial Intelligence is revolutionizing the accounting profession by automating routine tasks, improving accuracy, and providing valuable business insights. While challenges such as implementation costs and data security concerns exist, the benefits of AI far outweigh its limitations. The future accountant will work alongside intelligent systems, focusing on analysis, strategy, and decision-making. Organizations that effectively adopt AI technologies will gain a competitive advantage in the evolving business environment.

The analysis indicates that Artificial Intelligence has a positive impact on accounting by improving efficiency, accuracy, and decision-making. Despite challenges such as cost and security concerns, AI is expected to become an integral part of modern accounting practices.

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