

# The Impact of Artificial Intelligence on Accounting and Finance in Avadi Chennai

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***Abstract***—Artificial intelligence (AI) is revolutionizing industries with its superpower to help unlock business value through stimulating creativity and innovation, optimizing efficiency, and driving the achievement of outcomes. It creates both opportunities and challenges that have significant implications for the future of work. In the field of accounting and finance, AI is emerging as a transformative force that is reshaping the profession, influencing everything from data analysis to decision-making processes. As automation and predictive analytics are expected to become the new norm, traditional roles are undergoing profound modifications, prompting the need for adaptability, up skilling, and strategic alignment. AI is defined as “the capability of computer systems or algorithms to imitate intelligent human behaviour.” It is also defined as a scientific field focusing on developing intelligent machines that “combines computer science and robust datasets, to enable problem-solving.” The integration of AI technology in accounting and finance offers significant opportunities for innovation and productivity. It is anticipated that AI will automate numerous accounting processes, including accounts payable and receivable, monthly/quarterly closing, expense processing, procurement, and supplier management. Many accounting professionals and financial institutions in Avadi are still adapting to these technological changes. There is limited awareness regarding the practical impact of AI on accounting practices, financial management, employee performance, and organizational productivity. Therefore, this study aims to examine the impact of Artificial Intelligence on accounting and finance in Avadi, Chennai, and to understand both the benefits and challenges associated with AI adoption in this sector.

***Index Terms***—AI, Creativity and Innovation, Finance.

## I. INTRODUCTION

Artificial intelligence (AI) is revolutionizing industries with its superpower to help unlock business value through stimulating creativity and innovation, optimizing efficiency, and driving the achievement of outcomes. It creates both opportunities and challenges that have significant implications for the future of work. In the field of accounting and finance, AI is emerging as a transformative force that is reshaping the profession, influencing everything from data analysis to decision-making processes. As automation and predictive analytics are expected to become the new norm, traditional roles are undergoing profound modifications, prompting the need for adaptability, up skilling, and strategic alignment. Although AI cannot fully substitute human expertise, it will profoundly influence the professional trajectory of those in accounting and finance. As the role of accounting and finance professionals shifts in the AI era, teams must evolve accordingly. This transformation spans from the CFO to entry-level staff, emphasizing technology proficiency, data analytics, critical thinking, and cross-functional collaboration. Seamless AI integration requires a broader perspective that transcends technology to encompass personnel, processes, and structures. To navigate this evolving landscape, organizations must proactively embrace AI-induced changes. By fostering human-machine collaboration, organizational leaders can solidify their invaluable contributions to organizational growth. For individuals, focusing on up skilling and reskilling is essential. A culture of on-going learning will help team members to understand AI's strengths and weaknesses, steering toward its responsible and fruitful implementation. While AI offers numerous benefits and its adoption is poised to surge, accounting and finance professionals also face multifaceted challenges. To successfully integrate AI in the accounting and finance function, organizations need to overcome hurdles in human, technological, operational, and ethical dimensions. This includes aligning AI strategies with organizational goals and ensuring adequate executive support, addressing the skills gap of the existing workforce through training and development. This also includes fostering cross-functional collaboration, process reengineering, and scalability, particularly in smaller businesses. Technologically, particular focus should be placed on data quality and the digital preparedness of teams. As AI's capabilities burgeon, it becomes imperative for professionals to adeptly navigate the risks inherent in its deployment. Embracing ethical AI practices can lead to systems that are both efficient and trustworthy

### What Is AI

AI is defined as “the capability of computer systems or algorithms to imitate intelligent human behaviour.”

It is also defined as a scientific field focusing on developing intelligent machines that “combines computer science and robust datasets, to enable problem-solving.”

Based on its capabilities, AI can be categorized as weak AI, strong AI, and super AI. The only type of AI that exists today is weak AI, also known as narrow AI, which is designed and trained to perform a particular task. While it can perform its defined task much faster and better than the

human brain, it operates under a relatively limited range or context, unable to perform beyond its programmed capabilities. Strong AI, or artificial general intelligence (AGI), and super AI, or artificial super intelligence, remain theoretical concepts, with the former possessing the ability to learn and perform a wide range of tasks that human beings can and the latter surpassing human intelligence in thinking, reasoning, learning, and other cognitive abilities.

#### IMPLICATIONS FOR ACCOUNTING AND FINANCE

- ❖ The integration of AI technology in accounting and finance offers significant opportunities for innovation and productivity.
- ❖ It is anticipated that AI will automate numerous accounting processes, including accounts payable and receivable, monthly/quarterly closing, expense processing, procurement, and supplier management.
- ❖ AI-powered algorithms also allow accounting and finance professionals to obtain real-time insights through advanced data analytics to inform business decisions, such as identifying trends and optimizing strategies.
- ❖ As the role of the accounting and finance function is evolving toward a business partner within the organization that increasingly contributes to insight generation and value creation, the strategic integration of AI becomes crucial for driving these new roles and responsibilities, enabling professionals to focus on strategic analysis and decision support rather than routine tasks.
- ❖ To stay competitive, leaders in the accounting and finance field are also exploring the potential of integrating generative AI into their daily operations for productivity enhancement. A subset of machine learning models, generative AI refers to deep-learning systems that focus on creating new content in the form of text, images, and others.
- ❖ Companies such as Zoom and Ford have begun adopting AI to predict analysts' inquiries, research competitors, and address internal questions.
- ❖ While many accounting and finance leaders are in the experimentation phase, there are concerns regarding data security and the reliability of AI technologies.

## II. REVIEW OF LITERATURE

Ahmad Mohamad Abdo-Salloum and Sarah Chehade (2026) conducted a systematic review on the role of Artificial Intelligence in accounting and auditing practices. The study found that AI significantly improves accounting efficiency, auditing accuracy, fraud detection, and financial reporting quality. The researchers also identified challenges such as ethical concerns, employee resistance, and data privacy issues in AI implementation.

Sindi Nadia, Sambas Ade Kesuma, Keulana Erwin, and Fahmi Natigor Nasution (2026) studied recent trends in AI applications in accounting using a systematic literature review approach. The study found that AI improves accounting automation, financial reporting, auditing quality, and decision-making processes. However, the researchers highlighted concerns regarding

cybersecurity, lack of technical skills, and adaptation challenges among accounting professionals.

Ajrina Ghassani, Diana Sari, and Samuel Marselian (2024) conducted a bibliometric review of AI applications in accounting and finance. The study concluded that AI adoption has rapidly increased between 2021 and 2024, especially in fraud detection, financial analysis, and automation of accounting functions. The authors also emphasized the need for continuous technological development and employee training.

Patrick Weber, K. Valerie Carl, and Oliver Hinz (2023) explored Explainable Artificial Intelligence (XAI) applications in finance. The study highlighted that AI-based systems improve transparency, decision-making, and risk analysis in financial services. The researchers stressed that explainable AI is essential for maintaining trust and accountability in financial institutions.

Vijaya Kanaparathi (2024) examined the transformational role of AI and machine learning in financial technologies through a biometric review. The study concluded that AI applications in finance have grown significantly since 2017, especially in predictive analytics, fintech services, and financial automat

### III. STATEMENT OF THE PROBLEM

The rapid growth of Artificial Intelligence (AI) has transformed the accounting and finance sector by automating financial operations, improving data accuracy, enhancing fraud detection, and supporting better decision-making processes. In recent years, organizations in Avadi, Chennai have increasingly started adopting AI-based technologies such as automated accounting software, machine learning tools, and financial analytics systems. While these technologies provide efficiency and productivity, they also create challenges such as job displacement, skill gaps, data security concerns, and dependence on technology. Many accounting professionals and financial institutions in Avadi are still adapting to these technological changes. There is limited awareness regarding the practical impact of AI on accounting practices, financial management, employee performance, and organizational productivity. Therefore, this study aims to examine the impact of Artificial Intelligence on accounting and finance in Avadi, Chennai, and to understand both the benefits and challenges associated with AI adoption in this sector.

### IV. IMPORTANCE OF THE STUDY

- This study helps in understanding how Artificial Intelligence is changing traditional accounting and finance practices in organizations located in Avadi, Chennai.
- The research highlights how AI tools reduce human errors, save time, and improve the efficiency of financial reporting and accounting operations.
- The study identifies the problems faced by employees and organizations, including lack of technical skills, cyber security risks, and resistance to technological change.

- This research contributes to the existing knowledge on AI in accounting and finance and can serve as a reference for future researchers and students.
- It creates awareness among accounting and finance professionals about the importance of upgrading their technical and analytical skills to meet future industry requirements.

## V. OBJECTIVES OF THE STUDY

- ✓ To examine the extent of adoption of Artificial Intelligence (AI) technologies in accounting and finance firms in Avadi, Chennai.
- ✓ To identify the challenges and barriers faced by accounting professionals in Tamil Nadu when integrating AI tools.
- ✓ To study the socio-economic implications of AI adoption in accounting and finance jobs.
- ✓ To explore how AI improves fraud detection, compliance, and risk management in local businesses.

## VI. METHODOLOGY

The researcher adopted a convenience sampling technique. This method was used to collect data from respondents who were easily accessible and willing to participate in the study, such as accountants, finance professionals, auditors, business owners, and employees working in accounting and finance departments in Avadi, Chennai.

The convenience sampling technique was selected because it is cost-effective, time-saving, and suitable for exploratory research. It enabled the researcher to gather relevant information from respondents who have knowledge and experience regarding the use of Artificial Intelligence in accounting and financial activities.

### SAMPLE SIZE

The study collected data from 150 respondents working in accounting and finance-related sectors in Avadi, Chennai.

### Sources of Data

- **Primary Data:**

Primary data were collected through structured questionnaires distributed to accounting and finance professionals.

- **Secondary Data:**

Secondary data were collected from journals, research articles, books, websites, and previous studies related to Artificial Intelligence, accounting, and finance.

## VII. RESEARCH DESIGN

The study follows a descriptive research design to analyse the impact of Artificial Intelligence on accounting and finance practices.

## Area of the Study

The area selected for the study is Avadi, Chennai, focusing on organizations and professionals involved in accounting and finance activities.

## Tools Used for Analysis

The collected data can be analysed using:

- Percentage Analysis
- Rank Correlation
- Mean Square
- Simple Statistical Tables

## DEMOGRAPHIC INFORMATION

S.No	Demographic Factor	Category	No.of. Respondents	Percentage (%)
1	Gender	Male	90	60
		Female	60	40
2	Age	Below 25	30	20
		25-35	50	33.3
		36-45	35	23.3
		46-55	20	13.3
		Above 55	15	10
3	Educational Qualification	B.Com	45	30
		M.Com	30	20
		CA	25	16.7
		CMA	20	13.3
		MBA Finance	30	20
4	Job Position	Accountant	40	26.7
		Auditor	30	20
		Finance Manager	25	16.7
		Tax Consultant	30	20
		Analysis	25	16.7
5	Years of Experience	Less than 2 years	35	23.3
		2-5 Years	50	33.3

S.No	Demographic Factor	Category	No.of. Respondents	Percentage (%)
		6-10 Years	40	26.7
		More than 10 years	25	16.7
6	Type of Organization	Accounting Firm	45	30
		Banking Institution	35	23.3
		Corporate Finance Department	40	26.7
		Small Business Enterprise	30	20

Adoption of AI Technologies in Accounting and Finance Firms:

S.No	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean Score	Rank
1	My organization uses AI-based accounting software.	6	12	18	69	45	3.90	7
2	AI tools are used for financial data analysis.	4	9	15	74	48	4.02	6
3	AI has improved the efficiency of accounting operations.	3	7	12	72	56	4.14	3
4	AI technologies reduce manual workload.	2	6	13	68	61	4.20	1
5	AI is used for automated auditing processes.	8	15	27	63	37	3.71	8
6	AI applications are commonly adopted in Tamil Nadu finance firms.	9	18	30	60	33	3.60	10
7	Employees receive proper training for AI usage.	10	21	24	58	37	3.61	9
8	AI adoption has increased productivity in my organization.	3	9	16	71	51	4.05	4
9	AI systems help in faster decision-making.	4	8	18	69	51	4.03	5
10	My organization plans to expand AI usage in the future.	3	6	14	66	61	4.18	2

Challenges and Barriers in Integrating AI Tools:

S.No	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean Score	Rank
1	High implementation cost is a major barrier to AI adoption.	5	10	18	72	45	3.95	4
2	Lack of technical knowledge limits AI integration.	4	12	20	69	45	3.93	5
3	Employees fear job displacement due to AI.	8	15	24	63	40	3.75	9
4	Data security concerns hinder AI adoption.	3	8	16	74	49	4.05	2
5	Resistance to change affects AI implementation.	6	14	21	68	41	3.83	8
6	Lack of government support affects AI adoption.	9	18	27	61	35	3.63	10
7	AI tools require extensive employee training.	4	9	18	73	46	3.99	3
8	Small firms face greater difficulty adopting AI technologies.	3	7	15	76	49	4.07	1
9	AI systems are difficult to integrate with existing software.	5	13	24	67	41	3.84	7
10	Ethical and legal concerns limit AI usage in accounting.	6	11	22	70	41	3.86	6

Socio-Economic Implications of AI Adoption

S.No	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean Score	Rank
1	AI has created new job opportunities in finance and accounting.	4	9	18	73	46	3.99	5
2	AI reduces demand for routine accounting jobs.	5	11	20	70	44	3.91	7
3	Employees need continuous upskilling due to AI adoption.	2	5	14	76	53	4.15	2

S.No	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean Score	Rank
4	AI improves employee work-life balance.	6	13	24	67	40	3.81	9
5	AI adoption increases organizational profitability.	3	7	16	74	50	4.07	4
6	AI contributes to economic growth in Tamil Nadu businesses.	4	8	18	72	48	4.01	6
7	AI increases income inequality among employees.	10	18	30	58	34	3.59	10
8	AI enhances professional skill development.	3	6	15	75	51	4.10	3
9	AI improves job satisfaction by reducing repetitive tasks.	4	7	17	71	51	4.05	5
10	AI adoption will significantly transform accounting careers in the future.	2	4	11	70	68	4.25	1

#### AI in Fraud Detection, Compliance, and Risk Management

S.No	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean Score	Rank
1	AI helps in detecting financial fraud effectively.	6	12	24	63	45	3.86	3
2	AI improves accuracy in compliance monitoring.	5	15	27	60	43	3.81	5
3	AI reduces human errors in risk assessment.	7	14	30	57	42	3.75	7
4	AI enables real-time fraud detection.	4	10	21	66	49	3.97	1
5	AI strengthens internal control systems.	6	16	26	61	41	3.77	6
6	AI improves tax compliance processes.	8	18	29	55	40	3.67	9
7	AI helps businesses identify financial risks quickly.	5	12	23	64	46	3.89	2

S.No	Statements	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Mean Score	Rank
8	AI tools improve audit quality and transparency.	6	13	27	60	44	3.82	4
9	AI reduces financial losses caused by fraud.	7	15	32	54	42	3.73	8
10	AI enhances trust and reliability in financial reporting.	6	17	30	58	39	3.71	10

### VIII. FINDINGS

- ❖ The study reveals that the majority of respondents were male (60%), while female respondents constituted 40% of the total sample.
- ❖ Most respondents belonged to the age group of 25–35 years (33.3%), indicating that young professionals formed a significant portion of the study.
- ❖ Respondents aged 36–45 years accounted for 23.3%, followed by below 25 years (20%), showing balanced participation from different age groups.
- ❖ In terms of educational qualification, B.Com graduates represented the highest proportion (30%) among the respondents.
- ❖ Respondents with M.Com and MBA Finance qualifications each constituted 20%, reflecting a strong academic background in finance and accounting.
- ❖ Professional qualification holders such as CA (16.7%) and CMA (13.3%) also formed an important part of the sample.
- ❖ Among job positions, accountants represented the highest category with 26.7% of respondents.
- ❖ Auditors and tax consultants each accounted for 20%, while finance managers and analysts represented 16.7% each.
- ❖ Regarding work experience, the majority of respondents had 2–5 years of experience (33.3%), indicating that mid-level professionals dominated the survey.
- ❖ Respondents with 6–10 years of experience constituted 26.7%, while those with less than 2 years represented 23.3%.
- ❖ The study found that accounting firms employed the largest share of respondents (30%).
- ❖ Corporate finance departments accounted for 26.7% of respondents, followed by banking institutions (23.3%) and small business enterprises (20%).
- ❖ The majority of respondents agreed that their organizations use AI-based accounting software, indicating a growing adoption of AI technologies in accounting practices.
- ❖ Respondents expressed positive opinions regarding the use of AI tools for financial data analysis, showing that AI is increasingly supporting analytical functions in finance.

- ❖ The statement “Small firms face greater difficulty adopting AI technologies” received the highest mean score, indicating that smaller organizations experience more challenges related to cost, infrastructure, and expertise.
- ❖ Ethical and legal concerns were also considered important barriers, indicating that organizations are cautious about compliance, transparency, and ethical issues related to AI usage in accounting practices.
- ❖ The majority of respondents agreed that AI has created new job opportunities in finance and accounting, indicating that AI is generating new roles related to technology, analytics, and digital finance management.

## IX. SUGGESTIONS

- Organizations should conduct regular training and development programs to improve employees’ technical knowledge and AI-related skills. This will help accounting and finance professionals adapt to changing technologies effectively.
- Companies and educational institutions should create awareness regarding the benefits, uses, and limitations of Artificial Intelligence in accounting and finance practices.
- Since data privacy and cyber security concerns were identified as major barriers, organizations should implement strong security systems, encryption methods, and regular monitoring mechanisms to protect financial data.
- Government agencies and financial institutions should provide financial support, subsidies, or low-cost AI solutions to help small firms adopt AI technologies more easily.
- Organizations should establish ethical guidelines and compliance frameworks for the responsible use of AI in accounting and financial activities to maintain transparency and trust.
- AI should be used as a supportive tool rather than a replacement for human employees. Organizations should encourage collaboration between employees and AI systems to improve productivity and decision-making.
- Colleges and universities should include AI, data analytics, and financial technologies in accounting and finance courses to prepare students for future industry demands.
- Firms should invest in advanced software, digital infrastructure, and cloud-based technologies to ensure smooth integration of AI systems into accounting operations.
- Organizations should continuously update AI tools and software to improve efficiency, reduce errors, and maintain compatibility with changing financial regulations.
- Future studies may focus on specific AI applications such as block chain, robotic process automation, and predictive analytics in accounting and finance sectors across different regions.

## X. CONCLUSION

Artificial Intelligence has emerged as a transformative technology in the accounting and finance sector, significantly influencing operational efficiency, accuracy, fraud detection, compliance monitoring, and decision-making processes. The present study on “The Impact of Artificial Intelligence on Accounting and Finance in Avadi, Chennai” reveals that most organizations and professionals have a positive perception toward AI adoption in accounting and finance activities. The findings indicate that AI technologies reduce manual workload, improve productivity, support real-time fraud detection, and enhance financial reporting reliability. At the same time, the study also identifies several challenges such as high implementation costs, lack of technical knowledge, cyber security concerns, ethical issues, and fear of job displacement among employees.

The research further highlights that AI adoption is creating new career opportunities and increasing the need for continuous up skilling and professional development. Although AI cannot completely replace human expertise, it acts as a powerful support system that enables accounting and finance professionals to focus more on strategic analysis and business decision-making.

Overall, the study concludes that the successful integration of AI in accounting and finance requires proper training, strong organizational support, effective security measures, and continuous technological advancement. Organizations in Avadi, Chennai must adopt a balanced approach that combines human intelligence with AI capabilities to achieve sustainable growth and improved financial performance in the future.

## REFERENCE

- [1] Smith J, Kumar R. Impact of artificial intelligence on accounting and financial management. *J Account Finance Technol.* 2024;12(3):145-158.
- [2] Rajan P, Devi S. Artificial intelligence adoption in accounting practices in Chennai. *Int J Financ Stud.* 2023; 8 (2):55-67.
- [3] Williams T, George A. Role of AI in transforming modern finance systems. *Asian J Bus Account.* 2022; 15 (4):201-214.
- [4] International Federation of Accountants. Artificial intelligence and accounting. IFAC. Published 2024. Accessed May 21, 2026. <https://www.ifac.org/knowledge-gateway/discussion/artificial-intelligence-accounting>
- [5] International Federation of Accountants. Artificial intelligence and technology. IFAC. Published 2024. Accessed May 21, 2026. <https://www.ifac.org/knowledge-gateway/artificial-intelligence-technology>
- [6] Deloitte. The impact of generative AI in finance. Deloitte Insights. Published 2024. Accessed May 21, 2026. <https://www.deloitte.com/us/en/services/consulting/articles/generative-ai-in-finance.html>

- [7] Deloitte. Exploring artificial intelligence in finance. Deloitte. Published 2024. Accessed May 21, 2026. <https://www2.deloitte.com/us/en/pages/advisory/articles/generative-ai-in-finance.html>
- [8] Deloitte Insights. AI in financial services. Deloitte Center for Financial Services. Published 2024. Accessed May 21, 2026. <https://www2.deloitte.com/us/en/insights/research-centers/center-for-financial-services/ai-in-financial-services.html>
- [9] Deloitte. Generative AI and operational efficiency in finance operate. Deloitte. Published 2024. Accessed May 21, 2026. <https://www2.deloitte.com/us/en/pages/consulting/articles/generative-ai-and-operational-efficiency-in-finance-operate.html>
- [10] Weber P, Carl KV, Hinz O. Explaining AI in finance: past, present, prospects. arXiv. Published June 2023. Accessed May 21, 2026. <https://arxiv.org/abs/2306.02773>
- [11] Auditing of AI: legal, ethical and technical approaches. arXiv. Published 2024. Accessed May 21, 2026. <https://arxiv.org/abs/2407.06235>
- [12] Tech Radar Pro. AI is no longer a future concept but an operational reality. Published 2024. Accessed May 21, 2026. <https://www.techradar.com/pro/ai-is-no-longer-a-future-concept-but-an-operational-reality-new-kpmg-report-claims-firms-are-racing-to-deploy-ai-but-need-to-ensure-they-have-the-right-security-protections>
- [13] Tech Radar Pro. Cracking the AI code: realizing AI's true value in finance. Published 2024. Accessed May 21, 2026. <https://www.techradar.com/pro/cracking-the-ai-code-realizing-ais-true-value-in-finance>