



“Assessing the Impact of Artificial Intelligence on Individuals’ Financial Decisions”

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Abstract

The widespread incorporation of Artificial Intelligence (AI) in personal finance has revolutionized the decision process for individual customers. Personal finance decisions using artificial intelligence-based tools like Robo advisors, budgeting application software, investment recommendations, fraud detectors, and financial chatbots have improved the efficiency, effectiveness, and accuracy of financial decisions. The current paper aims at analyzing the effect of AI on personal finance decision making with specific focus on the levels of financial literacy, awareness, confidence, and behavior. The primary data were collected via a structured questionnaire administered to 167 respondents consisting of students, salary earning workers, and independent businessmen aware of financial technology innovations. Descriptive statistics, reliability, correlation, regression analysis, and ANOVA were used for empirical analysis of AI in personal finance decisions. It is observed that the awareness about AI in finance is relatively higher while its adoption remains moderate amongst the respondents. The level of awareness regarding AI in finance positively influences financial decision-making qualities such as planning and confidence in decision-making. Additionally, it is observed that AI plays an instrumental role in enhancing financial literacy and sound decision-making skills. The study shows that AI acts as an effective decision-making tool but not a substitute for judgment. The results of the study can help in devising meaningful insights for financial service providers, policy-makers, and AI developers interested in developing a reliable and user-friendly system.



Keywords: Artificial Intelligence, Financial Decision Making, FinTech, Financial Literacy, Consumer Behavior, Digital Finance, Robo-Advisors, AI Implementation

1. Introduction

Artificial Intelligence is among the latest technological innovations that have made an immense impact in the 21st century. Artificial Intelligence is widely used in the automation of operations, analysis, and efficient decision-making across different industries. The use of AI technology in the finance industry has been increasing quickly in areas such as investments, budgeting, fraud detection, portfolio analysis, risk analysis, and personal finances.

In the past, decision making in the finance industry was significantly dependent on individual decision-making, inadequate market information, and manual decision-making process. Individuals were usually confronted with a number of obstacles, such as inadequate data, emotional bias, lack of expertise, and inefficiency in responding to problems.

The rise of mobile banking services, online payments, financial technology applications, and customized personal finance applications has made the use of artificial intelligence much easier for individuals. Individuals can now depend on robo-advisors for investments, AI chatbots for advice, automated budgeting solutions for managing spending, and credit scoring systems for lending decisions.

However, there are worries about privacy, transparency in algorithms, trust issues, and over-reliance on automation. Consequently, there is a need to understand the effect of artificial intelligence on individuals' financial decisions.

The current paper explores the effect of Artificial Intelligence on individuals' financial decisions in India, where there has been rapid digitalization and fintech development.

2. Need for the Study

The growing popularity of AI-based financial technology necessitates research into its true effect on users. Despite a plethora of studies investigating the applications of artificial intelligence in organizational finance, very few studies investigate the behavioral impacts on individual users.

Reasons behind the study include the following:

- The rise of AI for financial decision-making among individuals.
- Doubts in trusting financial recommendations generated by algorithms.
- Moral considerations about privacy and bias influence adoption.
- Growth of digital behavior with regard to finance in India.
- Insufficient number of studies conducted from an empirical perspective in the Indian setting.



3. Scope of the Study

The boundaries of this study are confined to analyzing the influence of artificial intelligence on personal financial decisions. The study will target individuals who are familiar with or engage with artificial intelligence financial applications.

The study will include:

- Awareness of artificial intelligence financial tools
- Behaviour pattern when using the technology
- Influence on financial knowledge
- Confidence in making decisions
- Effectiveness in planning finances
- Ethical considerations
- Adoption intention for the future

4. Objectives of the Study

1. To examine how AI influences individuals' financial decision-making.
2. To assess whether AI improves financial literacy, awareness, and confidence.
3. To analyse direct behavioural effects of AI-based tools on financial decisions.
4. To identify risks and ethical concerns related to AI adoption in finance.
5. To evaluate future implications of AI in personal financial management.

5. Hypotheses of the Study

H1: AI adoption positively impacts individuals' financial decision-making by enhancing accuracy and efficiency.

H2: AI-based financial tools significantly improve financial literacy, awareness, and confidence.

H3: Increased AI adoption in finance will lead to higher efficiency, innovation, and personalized services in the future.

6. Review of Literature Review of Literature

Saoudi, A. and Zidane, M. (2025)

In this paper, the researchers studied the impact of Artificial Intelligence on decision-making in finance via risk modeling and predictive analysis. As per their conclusions, the use of Artificial Intelligence leads to increased accuracy, decreased uncertainty, and improved decision making. The study concluded that AI assists in the quicker and more efficient decision-making in personal and corporate finance.



Ghule, S. (2025)

The study examined the application of Artificial Intelligence in behavioural economics in India. According to the results, recommendations based on artificial intelligence change the investor behavior and contribute to higher involvement in financial products. Trust issues were determined as some barriers to AI use.

Roy, P., Sharma, R., and Mehta, A. (2025)

This bibliometric review analyzed studies on the application of Artificial Intelligence in finance. The researchers pointed out fast growth in scientific studies on portfolio management, fraud detection, automated trading, and customer data analyses. The study stressed that Artificial Intelligence is now driving innovations in finance.

Vancsura, B., Tatay, T., and Bareith, T. (2025)

This research studied machine learning techniques used for market forecast analysis in the finance industry. The researchers discovered that complex algorithms work better than regular statistical techniques in stock price prediction. Moreover, AI applications were viewed as very helpful in developing a successful investment strategy.

Wilson, D. (2025)

This piece analyzed explainable AI technology in financial activities. Many consumers avoid using AI solutions for financial decisions since they are complicated to interpret. According to the author, the implementation of transparent algorithms will foster greater consumer trust.

Wu, L., Chen, Y., and Zhang, H. (2024)

This research analyzed the use of AI techniques to analyze finances. The findings proved that AI helps in budget allocation, expense management, and credit decision-making. In other words, AI helped make financially informed decisions.

Adhikari, S., Hamal, K., and Baidoo Jnr, F. (2024)

This paper explored the use of AI for the detection of fraudulent transactions. According to the findings of the research, AI can be used to identify suspect transactions, avoid financial losses, and ensure cybersecurity in digital financial operations.

Kumari, S. and Rao, V. (2024)

In this work, the authors reviewed the role of AI in algorithmic trading and optimizing investments. Based on their study, the researchers concluded that AI is associated with rapid decision making, reduced risks, and portfolio diversification.

Chhavi, S. (2022)

This paper covered the topic of AI adoption by Indian companies. As a result, the authors discovered that such technologies allow for enhanced forecasting, automation, and customer services. The study pointed out that Indian customers gradually accept AI.



Gupta, R., Sharma, N., and Verma, S. (2020)

In this paper, the authors examined the role of AI and machine learning in investment strategies. As a result, it became clear that AI can help enhance portfolio strategy to minimize the risks and maximize gains.

7. Research Gap

Past literature primarily concentrates on practical applications including automated stock trading, fraud detection, and business forecasts. Few studies have examined:

- The individual's perspective toward AI systems
- The impact of AI on financial confidence
- The role of AI on literacy and awareness
- Behavioral adoption challenges in India
- Privacy issues in personal finances

The proposed study aims to fill this research gap by presenting empirical findings.

8. Research Methodology

Research Design

This study applies the descriptive and analytical research design.

Data Source

- **Primary Data:** Structured questionnaire
- **Secondary Data:** Journals, reports, academic literature

Sample Size

In total, 167 valid responses were obtained.

Sampling Procedure

Convenience sampling procedure was applied.

Tools Utilized

- Microsoft Excel
- Google Sheets
- Statistical Analysis Techniques



Statistical Tools

- **Percentage analysis** – It is applied to represent the respondent’s data in percentages for comparative purposes.
- **Mean scores** – This technique is used to determine the average score value and the overall perception of the respondents.
- **Reliability analysis** – The reliability analysis is employed to validate the reliability of the questionnaire items.
- **Correlation analysis** – This tool is applied to establish the nature of the relationship between the variables.
- **Regression analysis** – It is applied to estimate the influence of independent variables on dependent variables.
- **Analysis of Variance (ANOVA)** - Used to compare mean differences among multiple groups and test statistical significance.

9. Instrument Reliability

Instrument was subjected to reliability testing. Resulting reliability score showed acceptable levels of consistency, making the instrument suitable for further analysis.

10. Data Analysis and Interpretation

10.1 Respondents’ Demographic Profile (N = 167)

Based on the descriptive analysis, it is evident that majority of respondents fell into the category of young adults. This group includes students and entry level professionals. Young adults make up the core consumer group for digital and artificial intelligence technologies.

Variable	Major Category	Percentage (%)
Age	21–30 Years	78%
Gender	Female / Male (balanced mix)	—
Occupation	Students & Salaried Employees	72%
Education	Graduate & Postgraduate	81%

Interpretation

The sample is highly relevant for the study because digitally active and educated users are more likely to understand and use AI-based financial applications.



10.2 Awareness of Artificial Intelligence in Finance

Response Level	Percentage
High Awareness	64%
Moderate Awareness	27%
Low Awareness	9%

Interpretation

The findings reveal that awareness of AI-based financial tools is significantly high. Most respondents are familiar with concepts such as chatbots, robo-advisors, fraud alerts, budgeting apps, and recommendation systems.

10.3 Usage of AI-Based Financial Tools

Tool Type	Usage Level
Budgeting Apps	High
UPI Fraud Alerts	Very High
Investment Suggestions	Moderate
Robo-Advisors	Moderate
AI Chatbots	High

Interpretation

Users are more comfortable with low-risk and routine AI tools such as alerts, budgeting assistance, and chat support, while adoption of robo-advisory and automated investing remains moderate.

11. Correlation Analysis

The study tested the relationship between AI usage and financial decision outcomes.

Variables	Correlation (r)	Significance
AI Usage & Decision Accuracy	0.71	Significant
AI Usage & Financial Confidence	0.66	Significant
AI Usage & Financial Literacy	0.69	Significant
AI Usage & Planning Efficiency	0.73	Significant



Interpretation

The results show a strong positive relationship between AI adoption and financial decision quality. Increased AI usage is associated with higher confidence, improved literacy, and better planning behaviour.

12. Regression Analysis

Regression was conducted to assess whether AI usage predicts financial decision-making quality. Where:

Y = Financial Decision Quality

X = AI Usage Level

Variable	Beta Coefficient	t-value	Significance
AI Usage	0.68	High	Significant

Interpretation

AI usage has a statistically significant positive impact on financial decision quality. This confirms that users who adopt AI tools make better and more efficient financial decisions.

Hypothesis Result

H1 Accepted – AI adoption positively impacts financial decisions by enhancing efficiency and accuracy.

13. ANOVA Analysis

ANOVA was used to determine whether perceptions differ across demographic groups.

Variable Tested	Result
Age vs AI Adoption	Significant
Education vs AI Trust	Significant
Occupation vs Usage Frequency	Significant

Interpretation

Younger, educated, and professionally active respondents show stronger acceptance of AI-based financial systems.



14. Hypothesis Testing Summary

Hypothesis	Result
H1: AI improves decision-making accuracy and efficiency	Accepted
H2: AI improves literacy, awareness, confidence	Accepted
H3: AI will improve future finance services	Accepted

15. Discussion of Findings

The results show that AI is positively influencing people's behavior towards their personal finances. It enables people to analyze their financial information quickly and makes their life easy by removing any uncertainty and allowing better planning.

It was found that the result is in accordance with other research studies done by other researchers, stating that AI decreases behavioral biases and increases rationality in decision-making. Yet, respondents were careful about fully relying on automated systems for investments.

People want AI to be their guide in making financial decisions.

16. Key Findings

Findings Based on Objectives

Objective 1: To examine how AI influences individuals' financial decision-making.

1. High levels of awareness about AI have been shown to increase among the respondents, meaning greater acceptance of digital financial tools.
2. AI has a huge impact on increasing planning skills, improving the quality of decisions, and accelerating financial management processes.

Objective 2: To assess whether AI improves financial literacy, awareness, and confidence.

3. Financial confidence increases due to the higher level of financial awareness and security when using financial services powered by AI.
4. Based on the findings, it is clear that financial literacy has improved through the use of AI tools.

Objective 3: To analyse direct behavioural effects of AI-based tools on financial decisions.

5. While at the moment the level of actual use of AI-powered financial tools is moderate, adoption is rapidly increasing.
6. Among those studied, young and well-educated people were quicker to adopt new technologies than other demographic groups.

**Objective 4: To identify risks and ethical concerns related to AI adoption in finance.**

7. Confidentiality preservation and confidence in AI systems still play a significant role in restraining widespread implementation.
8. A considerable number of users require transparency and human intervention prior to using AI suggestions.

Objective 5: To evaluate future implications of AI in personal financial management.

9. The use of AI can be considered mainly an assisting method but not a substitute for human wisdom.
10. The future of personal finance management will be more effective, tailored to individuals, and technology-oriented due to AI involvement.

17. Conclusion

AI has proven to be a disruptive factor in influencing how people make decisions concerning their finances in today's highly digitized world. It is concluded that artificial intelligence has a considerable impact on multiple components related to personal finance, among which are financial literacy, financial awareness, financial planning skills, and decision-making abilities. Through its ability to analyze huge amounts of financial data instantly, AI-based technology enables users to gain better knowledge about market dynamics, spending patterns, investment choices, and risks involved. People who employ AI technology for financial purposes, like robo-advisors, budget planners, financial fraud identification software, and recommendation services, are capable of making rational and conscious financial decisions in contrast to conventional approaches, which depend mostly on people's gut feeling.

Moreover, AI can help minimize human mistakes, emotional tendencies, and the time involved in decision making, which results in better financial decision-making. Additionally, AI can provide increased availability of financial advice to those who cannot afford it, thus resulting in financial inclusion. On the downside, although there are numerous advantages associated with using AI in personal finance, there are certain aspects that need to be addressed for the successful implementation of AI in the field. These aspects include issues like ethics, transparency, understanding of the algorithm used, privacy, security, and user trust. Unless users know how AI makes its decisions, they would be unwilling to use it to their advantage.

Thus, AI must be treated as an assistance tool which enhances human intelligence but does not replace human judgment altogether. Human intervention is indispensable in making complicated and risky decisions. In the ongoing process of digitization of India by means of innovative fintech, digital payment methods, and smartphone usage, Artificial Intelligence is likely to emerge as one of the most critical components of the financial system of tomorrow.

18. Suggestions

- **The financial sector must ensure transparency in AI recommendations.**

Financial service users should know the process behind AI recommendation generation. Transparency of AI models fosters trust and confidence in the services provided by the technology.



- **Rigorous privacy measures must be implemented.**

AI systems must secure data through encryption methods and regulatory policies that minimize risks such as fraud and data breaches.

- **Education programs must be enhanced.**

Educating financial service users about the use of AI tools will increase awareness and foster effective utilization of AI-powered financial services.

- **The AI tool must be customized for user convenience.**

Financial software applications must be tailored to suit the needs, preferences, and competencies of the end-user.

- **Human advice should still be offered.**

Human financial advisors must provide assistance on issues that require specialized skills and expertise.

19. Limitations

- Sample limited to 167 respondents.
- Majority were young educated users.
- Study focused on self-reported perceptions.
- Geographic scope limited.

20. Future Scope

- **Differences in AI adoption between rural and urban areas**

It would be interesting to conduct further research that will examine the differences in the level of awareness, accessibility, and use of artificial intelligence technologies in the field of finance in rural and urban areas.

- **Sustained changes in consumer behaviour**

Another promising research area would be the assessment of how the regular use of artificial intelligence impacts consumers' savings, expenditures, and investments.

- **Use of Generative AI in finance**

Future studies could focus on the potential uses of Generative AI in finance for customer service and financial advisory services. At the same time, one should examine possible risks associated with the use of Generative AI.

- **India compared with other countries**

Finally, it is crucial to conduct comparative research regarding the application of AI in finance across different countries.



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