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The Role of Artificial Intelligence in Financial Decision-Making: A Study of Awareness, Adoption and Trust Among Young Investors in Bengaluru

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ABSTRACT

Artificial Intelligence (AI) is increasingly used to process financial information. AI-based applications include investment apps, robo-advisors, financial chatbots, and financial analysis tools. These AI-based applications enable investors to process and gain insights from the vast amount of available information. But the use of such an application might not only depend on its perceived usefulness but also on the knowledge and trust in the information provided by AI-based applications. Thus, this research aims at exploring the connection between Artificial Intelligence and financial decisions of young investors in Bengaluru and particularly will focus on the knowledge and adoption rate and the trust in AI-based financial applications. This will be a quantitative study, where primary data will be collected via a questionnaire among young investors in Bengaluru. The study will investigate such factors as awareness regarding AI applications, frequency and purpose of AI use, usefulness and reliability of AI applications, issues related to privacy, and trust in AI-based financial information. Descriptive and inferential statistics will be employed for data analysis and investigating the relationship between the variables.

Keywords: Artificial Intelligence; Financial Decision-Making; Young Investors; AI Adoption; Trust in AI

1: INTRODUCTION:

1.1 Introduction

Artificial intelligence is the use of computer technology for doing activities such as pattern identification, language translation, forecasting, and decision-making. In the financial sector, AI

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is applied in chatbots, robo-advisors, financial analysis software, and online banking. Although AI technologies can provide the user with correct information, the data obtained might be false. Young investors may use AI to look into savings, investments, and market trends. However, financial decisions need careful consideration, awareness of privacy, and checking the information. This study looks at awareness, use, perceived usefulness, reliability, trust, risk worries, and future plans to use AI among people in Bengaluru.

1.2 Problem Statement

Despite the increasing accessibility of AI-driven financial tools, being aware of their presence does not guarantee their usage or trust in them. Potential doubts regarding the accuracy, privacy, and unsuitable advice could reduce the use of such tools. The current research focuses on the answers provided by 53 participants.

1.3 Research Gap

Past studies have considered the use of AI by robo advisors, financial literacy, and trust. Yet, a concentrated study could offer insight into the same amongst youth in Bengaluru. This study contributes to some information about awareness, experience, trust and perceptions of risk while realizing the limitation of the few individuals surveyed in generalization or causality.

1.4 Research Objectives

- To check how much people know about AI tools in finance across different ages.
- To look at use of AI tools and find out what tools and reasons people used.
- To see how people think about whether AI helps with information and if it is accurate.
- To look at how people trust AI tools and their worries about wrong information or privacy.
- To see how likely people are to use AI tools in the future and if that is linked to trust, where the data allows for that.

1.5 Research Questions

- How much do people know about AI tools in finance?
- How extensively have these tools been utilized, and what are they? For what purposes?
- How do people rate how helpful and accurate AI tools are?
- How do trust and worries about risks show up in the group?

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• How likely are people to use AI tools in the future, and is that linked to trust?

2: REVIEW OF LITERATURE AND SIGNIFICANCE:

2.1 Review of Literature

1. **Banerjee (2025):** This study looked at how Indian retail investors use robo-advisors. It found that being ready for technology and knowing about money are important for wanting to use these tools.

2. **Adoption of Artificial Intelligence in Financial Services: The Case of Robo-Advisors in India (2024):** This study looked at how people use robo-advisors. Found that trust, worry, how well they think the tool works, and wanting a human advisor are important.

3. **OECD(2026):** The current paper discussed artificial intelligence in finance and concluded that although AI may simplify and individualize financial transactions, several problems such as bias, privacy concerns, and inaccuracies may emerge.

4. **Iyer and Tiwari (2026)**: This research looked at how AI helps with investment decisions in the Indian FinTech world, focusing on how useful people think it is, how much they trust it, and how they accept the technology.

5. **Assessing the Utility of Advanced Adoption Models for AI-Based Financial Services (2026)**: This research examined usage behavior toward robo advisors and concluded that users find that the tool is useful can perform its task well find the tool performs its task well and intend to use it.

1. Key Concepts

• Artificial intelligence in finance: Using AI software to handle information, answer questions, help with analysis, or make decisions.

• Awareness: How much the individual is knowledgeable about the use of AI tools in finance through the questions.

• Adoption and use: How much people have used these tools and the things they used them for.

• Perceived usefulness: How much a person thinks AI tools help them understand money and make choices.

• Reliability: How much a person thinks the money information from AI is correct and can be trusted.

• Trust and risk worries: Trust means believing that the AI money information is useful; risk worries include accuracy and privacy issues.

• Future use plans: How likely a person says they will use AI tools for money or investment choices in the future.

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2.3 Significance of the Study

The study is valuable for investors, educators, creators of financial instruments, and financial literacy educators. For investors, the study brings to light the importance of analyzing information obtained through AI. For educators, the results can be applied in building educational programs on financial skills, privacy, and fact-checking. For corporations that create financial tools, the concepts of usefulness, trust, and risk can be used to improve user education and interface design. For researchers, the study offers local data and represents a starting point for more extensive research. The results of the study have nothing to do with a particular product and financial performance of AI tools, but represent attitudes and reported behavior of participants.

3: RESEARCH METHODOLOGY

3.1 Research Design

The research uses the cross-sectional survey design to collect data through the administration of structured questions. This type of research design is appropriate for measuring the level of knowledge, use, attitude, and intentions of the respondents. It does not allow establishing any cause-and-effect relationship between variables.

3.2 Population and Sampling Technique

The study focuses on the investors and potential users of AI in Bengaluru. The data set consists of 53 responses. The sampling procedure and administration of the survey are not clearly stated in the document. It is not mentioned whether random sampling was used. Therefore, the findings can be regarded as a snapshot of the given population and not the whole youth population of investors in Bengaluru.

3.3 Research Instrument and Data Collection

The tool used is a list of ten questions. It asks about age, knowledge of AI tools, past use, tools used or seen, what they were for, how helpful they are, how reliable they are, how much they trust them, and if they have worries or plan to use them. The analysis uses the 53 answers from the file as the source.

3.4 Data Analysis Tools and Techniques

• Frequency and percentage distributions summarise categorical responses, while cross-tabulation compares age and AI awareness.

• Ranking is based on response frequency for tools and purposes.

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• Likert responses are coded from 1 to 5, where the scale direction is clear.

• Means and standard deviations are used for numeric or ordinal variables; reliability and trust ratings are analysed as recorded.

• Spearman correlation explores the relationship between trust and future intention, without implying causation.

3.5 Limitations of the Study

• The study has 53 responses. It may not show what all young investors in Bengaluru think.

• How people were picked, where they were found, and when data was gathered is not clear in the file.

• People's answers may be affected by what they remember, how they understand the questions, or what they think others want to hear.

• The questions only show what people think and plan to do, not if they actually use the tools or if the tools work well.

• Some parts of the answers may be missing or in different formats; calculations use what is there and say how many answers were used.

• The study is done once. Cannot show that one thing makes another happen.

4: DATA ANALYSIS AND INTERPRETATION

This analysis is based on the file containing 53 answers. The percentages presented in the tables are calculated depending on the number of respondents who answered the questions. The graphs represent the distribution of the answers. No answers were fabricated.

4.1 Question 1: Awareness and Demographics

Combined variables: age group and awareness of AI-based financial tools.

Statistical methods: frequency, percentage, and age-wise cross-tabulation.

Age group × awareness - cross-tabulation

What is your age group?	High	Low	Moderate	Not aware	Very high
18–21 years	7	3	13	0	4
22–25 years	3	1	1	3	1
26–30 years	2	1	2	0	2
31–35 years	2	3	3	0	2

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Figure 4.1.Age Group-wise Awareness of AI-Based Financial Tools

Interpretation: The cross-tabulation aids in the identification of the differences in awareness categories by age groups. The fact that the sample is very small means that the differences identified cannot be taken to prove that age influences awareness.

4.2 Question 2: Adoption and Usage Patterns

Previous use

Response category	Frequency	Percentage
Yes, regularly	12	22.6%
Yes, occasionally	14	26.4%
Tried once or twice	7	13.2%
No, but I am interested	19	35.8%
No, and I am not interested	1	1.9%

Figure 4.2.Previous use.

Tools used or familiar

Response category	Frequency	Percentage
AI chatbots (e.g., ChatGPT)	14	33.3%
Robo-advisors or automated investment platforms	10	23.8%
AI-powered stock analysis tools	9	21.4%
AI features in banking or investment apps	9	21.4%

Figure 4.3. Tools used or familiar.

Purpose of use

Response category	Frequency	Percentage

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Researching stocks or other investments	15	28.3%
Financial planning and budgeting	10	18.9%
Receiving investment suggestions	8	15.1%
Comparing investment options	8	15.1%
Understanding financial concepts	7	13.2%
I would not use AI for financial purposes	5	9.4%

Figure 4.4.Purpose of use.

Interpretation: Comparing past use answers with the tools and reasons for use helps tell the difference between experience and just knowing about the tools. Saying that you want to use a tool is not the same as using it. Blank answers are kept as missing rather than being put into a certain category.

Note: Percentages for tools used or familiar are based on 42 answers. The other 11 answers were "None" for this question. They are not counted in the percentages.

4.3 Question 3: Perceived Usefulness and Reliability

Combined variables: Usefulness and Reliability/Accuracy. Usefulness has a five-point agreement scale. The reliability measure is presented as a numerical value in the spreadsheet. Mean and sample standard deviation are employed for summarization.

Perceived usefulness

Response category	**Frequency**	**Percentage**
Strongly agree	8	15.1%
Agree	17	32.1%
Neutral	19	35.8%
Disagree	8	15.1%
Strongly disagree	1	1.9%

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Figure 4.5. Perceived usefulness ratings.

Measure	Valid n	Mean	Sample SD
Perceived usefulness (coded 1–5)	53	3.43	0.99
Reliability rating (numeric as entered)	53	3.36	0.88

Reliability rating distribution

Response category	Frequency	Percentage
1	1	1.9%
2	6	11.3%
3	24	45.3%
4	17	32.1%
5	5	9.4%

Figure 4.6.Distribution of recorded reliability ratings.

Interpretation: A higher mean means a rating on the scale if higher numbers mean positive things. These averages show what the group thought. They don't prove whether AI financial info is correct.

4.4 Question 4: Trust and Risk Concerns

Combined variables: Trust in AI-based financial tools and concerns about wrong info or privacy. Trust is a number in the spreadsheet. Risk concern is an agreement label. It is coded in the direction of more concern.

Measure	Valid n	Mean	Sample SD
Trust rating (numeric as entered)	53	3.32	0.89
Risk concern (coded 1–5)	53	3.28	0.82

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Relationship	Paired n	Spearman rho	p-value
Trust and risk concern	53	0.126	0.369

Figure 4.7.Comparison of Trust and Risk Concerns Regarding AI-Based Financial Tools

Interpretation: Trust had an average rating of 3.32, whereas the average rating for risk concern was 3.28. Spearman rank order correlation was applied to determine the relationship between trust and risk concerns. The analysis produced a positive relationship with a rho of 0.126; however, this relationship is not statistically significant, since the p-value is 0.369. Since the p-value is greater than 0.05, we cannot establish a relationship between trust and risk concerns. In this sample size of 53, there does not seem to be any significant relationship between trust and risk concerns.

4.5 Question 5: Future Adoption Intention

The future-use question is shown with frequencies, percentages, and a 1-5 scale where very unlikely is 1, unlikely is 2, neutral is 3, likely is 4, and very likely is 5. Trust and future intention are then checked using Spearman rank correlation to see if they are connected.

Future adoption intention distribution

Response category	Frequency	Percentage
Very likely	7	13.2%
Likely	20	37.7%
Neutral	19	35.8%
Unlikely	6	11.3%
Very unlikely	1	1.9%

Figure 4.8.Future adoption intention.

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Measure	Valid n	Mean	Sample SD
Future adoption intention	53	3.49	0.93
Relationship	**Paired n**	**Spearman rho**	**p-value**
Trust and future intention	53	0.481	0.001

Interpretation: The mean rating of the future adoption intention variable was 3.49, which is an indication that the responses were in between neutral and likely. According to the Spearman rank correlation test, there exists a positive correlation between trust and future adoption intention, and the correlation coefficient was found to be 0.481 at a significance level of 0.001. The findings show that high levels of trust are positively correlated with future adoption intentions of AI-based financial applications.

5: FINDINGS, SUGGESTIONS AND CONCLUSION

5.2 Major Findings

1. Age Group: Most respondents were aged 18–21 (27; 50.9%).
2. Awareness: Moderate AI awareness was most common (19; 35.8%).
3. Previous Use: The most common response was “No, but I am interested” (19; 35.8%).
4. Tools Used: AI chatbots were reported by 14 respondents (26.4%).
5. Purpose: Researching stocks and investments was the main purpose (15; 28.3%).
6. Utility: Most participants maintained a neutral attitude toward the utility of AI (n = 19, 35.8%).
7. Risk Perception: Most participants also had a neutral attitude towards risks associated with AI (n = 29, 54.7%).
8. Future Intention: The most common response was “Likely” (20; 37.7%).

The study included 53 respondents. Valid response counts varied by question, and percentages were calculated using the applicable responses.

5.2 Suggestions

- Promote AI literacy to help young investors understand AI-generated financial information.
- Encourage verification of AI advice using reliable, regulated sources.
- Improve transparency about AI tools’ limitations and potential errors.
- Strengthen data privacy, consent, and security practices.
- Provide human guidance for high-value or high-risk financial decisions.

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• Future studies should use diverse samples and examine financial knowledge, investment experience, and ease of use.

• Clearly document questionnaire scales and response options to ensure reproducible calculations.

5.3 Conclusion

This study examined AI awareness, usage, usefulness, reliability, trust, risk concerns, and future intentions among 53 respondents. The findings highlight the importance of financial knowledge, transparency, privacy, and verifying AI-generated information. AI should support, not replace, financial decision-making. Since the sample was small and responses were self-reported, the findings cannot be generalised to all young investors in Bengaluru. More research using bigger samples and standardized tools is advised.

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