

# Investor Perceptions of AI-Generated vs Manual Research Reports: A Comparative Study in Financial Services

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**Abstract:** This study examines investor perceptions, preferences, and trust levels regarding AI-generated research reports compared to traditional manual research reports in the financial services sector. Using a sample of 101 investors from Goodwill Wealth Management Private Limited, the research employs descriptive analysis, independent t-tests, ANOVA, chi-square tests, and regression analysis to understand factors influencing investor adoption of AI-based financial tools. Results indicate that while investors appreciate AI's speed and data accuracy, they still value human expertise for judgment and contextual analysis. The study reveals no significant demographic differences in AI trust levels, suggesting broader acceptance across age and gender groups. These findings provide valuable insights for financial service providers seeking to optimize their research delivery strategies.

**Keywords:** Artificial Intelligence, Financial Services, Investment Research, Investor Behavior, Technology Adoption

## 1. Introduction

The financial services industry is experiencing a transformative shift with the integration of Artificial Intelligence (AI) technologies. This technological evolution has fundamentally altered how investment research is conducted, analyzed, and presented to investors. While AI-generated reports offer unprecedented speed, scalability, and data processing capabilities, traditional manual research reports continue to provide human expertise, contextual judgment, and nuanced analysis that many investors still value.

The emergence of AI in financial services presents both opportunities and challenges. On one hand, AI can process vast amounts of data in real-time, identify patterns, and generate insights at speeds impossible for human analysts. On the other hand, concerns about data privacy, lack of human judgment, and the "black box" nature of AI algorithms create hesitation among investors.

This study addresses the critical question of how investors perceive and respond to AI-generated research reports compared to manual reports, using Goodwill Wealth Management Private Limited as a case study. Understanding these perceptions is crucial for financial service providers as they navigate the balance between technological innovation and client trust.

## 2. Literature Review

### 2.1 AI Adoption in Financial Services

Sandeep Singh and Atul Kumar (2024) found that trust and perceived usefulness significantly influence attitudes toward AI-based robo-advisory services in North India. Their research using the Technology Acceptance Model (TAM) revealed that perceived ease of use and social influence are key factors in adoption decisions, with gender differences in risk perception and usability preferences.

Samira Khonsha and Hojjatollah Sadiqi (2024) demonstrated how AI and machine learning improve robo-advisory services through personalized investments and risk assessment. Their study of 19,285 users using Random Forest and Gradient Boosting models showed that income and net worth are primary factors affecting risk tolerance, though challenges remain in trust and data security.

### 2.2 Investor Behavior and Technology Acceptance

Xianpei Hong et al. (2023) examined how uncertainty reduction strategies influence investment intentions in robo-advisors. Their research identified algorithmic interpretability, structural assurance, and interactivity as key strategies for reducing uncertainty and enhancing perceived value.

Wymanetal (2014) highlighted that younger, technologically-savvy investors demonstrate greater comfort with self-directed investing than older generations, suggesting generational differences in technology adoption patterns.

### 2.3 Trust and Risk Perception

Dr. Kiran (2009) defined risk tolerance as the minimum and maximum ability to bear risk, while Tversky and Kahneman (1974) revealed that decision-making under uncertainty often deviates from probability rules, emphasizing the importance of understanding investor psychology.

### 3. Research Methodology

#### 3.1 Research Design

This study employs a descriptive research design with a quantitative approach to examine investor perceptions of AI-generated versus manual research reports. The research framework focuses on understanding behavioral patterns across various investor demographics.

#### 3.2 Sample and Data Collection

- **Population:** Individual investors who are clients of Goodwill Wealth Management Private Limited
- **Sampling Method:** Convenience sampling
- **Sample Size:** 101 respondents
- **Data Collection:** Primary data collected through structured online questionnaires distributed via Google Forms, social media, and investment forums

#### 3.3 Data Analysis Tools

The study employs several statistical techniques:

- **Frequency Analysis:** To examine demographic distributions
- **Independent t-test:** To compare mean differences between groups
- **ANOVA:** To analyze variance across multiple groups
- **Chi-square test:** To examine associations between categorical variables
- **Regression analysis:** To identify relationships between variables

## 4. Results and Analysis

#### 4.1 Demographic Profile of Respondents

Table 1: Age Distribution of Respondents

Age Group	Frequency	Percentage	Cumulative %
Below 25	19	18.8	18.8
25-35	63	62.4	81.2
36-45	17	16.8	98.0
46-55	1	1.0	99.0
Above 55	1	1.0	100.0
<b>Total</b>	<b>101</b>	<b>100.0</b>	-

Table 2: Gender Distribution of Respondents

Gender	Frequency	Percentage
Male	68	67.3
Female	33	32.7
<b>Total</b>	<b>101</b>	<b>100.0</b>

Table 3: Educational Qualification Distribution

Education Level	Frequency	Percentage
Below Higher Education	3	3.0
Graduate	54	53.5
Post Graduate	37	36.6
Professional	4	4.0
Others	3	3.0
<b>Total</b>	<b>101</b>	<b>100.0</b>

Table 4: Investment Experience Distribution

Experience Level	Frequency	Percentage
Below 1 year	22	21.8
1-3 years	70	69.3

Experience Level	Frequency	Percentage
4-6 years	7	6.9
Above 6 years	2	2.0
<b>Total</b>	<b>101</b>	<b>100.0</b>

#### 4.2 Statistical Analysis Results

Table 5: Independent T-Test Results - AI Risk Reduction Perception

Test Statistic	Value	df	Sig. (2-tailed)	Mean Difference
Levene's Test F	1.516	-	0.221	-
t-statistic	0.708	99	0.481	0.0829
95% CI	-	-	-	[-0.1494, 0.3152]

**Interpretation:** The independent t-test reveals no statistically significant difference ( $p = 0.481 > 0.05$ ) between groups regarding AI's ability to reduce investment risks, indicating consistent perceptions across demographic categories.

Table 6: ANOVA Results - Satisfaction with AI Services

Source	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.821	4	0.205	0.464	0.762
Within Groups	42.486	96	0.443	-	-
Total	43.307	100	-	-	-

**Interpretation:** The ANOVA results ( $F = 0.464$ ,  $p = 0.762$ ) indicate no significant difference in satisfaction levels with AI-based services across different demographic groups.

Table 7: Chi-Square Test Results - Occupation vs AI Introduction Source

Test	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	6.234	8	0.621
Likelihood Ratio	6.248	8	0.619

**Interpretation:** The chi-square test ( $\chi^2 = 6.234$ ,  $p = 0.621$ ) shows no significant association between occupation and the source of AI awareness in finance.

Table 8: Regression Analysis - Age and Data Sharing Comfort

Model Summary	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error
Model 1	0.241	0.058	0.048	0.689

  

Coefficients	B	Std. Error	$\beta$	t	Sig.
Constant	0.845	0.489	-	1.728	0.087
Data Sharing Comfort	0.256	0.104	0.241	2.469	0.015

**Interpretation:** The regression analysis reveals a statistically significant positive relationship ( $p = 0.015$ ) between age and willingness to share financial data with AI platforms, though the model explains only 5.8% of the variance.

#### 4.3 Key Findings Summary

Table 9: Summary of Key Research Findings

Finding Category	Key Results
<b>Demographics</b>	81.2% aged $\leq 35$ ; 67.3% male; 90.1% graduates/postgraduates
<b>Experience</b>	91.1% have $< 3$ years investment experience
<b>AI Perception</b>	No significant gender/age differences in AI trust
<b>Data Sharing</b>	Positive correlation between age and data sharing comfort
<b>Service Satisfaction</b>	No significant demographic differences in AI service satisfaction
<b>Awareness Sources</b>	Social media primary source of AI awareness

## 5. Discussion

### 5.1 Demographic Insights

The study reveals a predominantly young, educated, and male investor base with limited investment experience. This demographic profile suggests that the findings primarily reflect the perspectives of early-career professionals who are likely more open to technological innovation in financial services.

### 5.2 AI Acceptance Patterns

Despite the technological nature of AI tools, the study found no significant demographic differences in AI trust or adoption patterns. This suggests that factors beyond age and gender, such as perceived usefulness, ease of use, and security concerns, may be more influential in AI adoption decisions.

### 5.3 Implications for Financial Service Providers

The findings suggest that financial service providers should focus on:

1. **Hybrid Approaches:** Combining AI efficiency with human expertise
2. **Education and Transparency:** Addressing privacy concerns and explaining AI functionality
3. **User Experience:** Simplifying interfaces for broader accessibility
4. **Trust Building:** Emphasizing security measures and regulatory compliance

### 5.4 Limitations

- Limited sample size (n=101) from a single organization
- Geographical concentration in South India
- Convenience sampling may introduce selection bias
- Rapidly evolving AI technology may impact findings relevance

## 6. Conclusions and Recommendations

### 6.1 Conclusions

This study provides evidence that investors, particularly younger and newer ones, are increasingly open to AI-driven financial tools while still valuing human expertise. The absence of significant demographic differences in AI trust suggests broader acceptance potential across investor segments.

The research highlights the importance of hybrid models that leverage AI's computational advantages while maintaining human oversight for complex judgment calls. This approach can address investor concerns about data privacy and algorithmic transparency while delivering the speed and accuracy that modern investors expect.

### 6.2 Recommendations

1. **Investor Education:** Implement regular webinars and workshops to improve AI literacy
2. **Hybrid Service Models:** Combine AI analytics with human expertise for comprehensive service
3. **Enhanced Security Communication:** Clearly communicate data protection measures
4. **Personalized Approaches:** Tailor communication strategies to different investor segments
5. **User-Friendly Design:** Simplify AI platform interfaces for broader accessibility

### 6.3 Future Research Directions

Future studies should explore:

- Longitudinal analysis of AI adoption patterns
- Cross-cultural comparisons in AI acceptance
- Impact of AI explanation techniques on investor trust
- Long-term performance comparison of AI vs. manual research recommendations

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