Impact of Digital Platforms on Investment Decisions: A Study of Online Share Trading Trends and Risk Assessment in Retail Investors

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ABSTRACT

Indian economy has witnessed revolutionary changes due to globalization, technological advancements and government reforms. Digital platforms have dramatically changed the investment trend. Among retail investors, online share trading has increased significantly. The study considers this shift brought about by digital platforms and their impact on trading patterns, specifically risk evaluation and control, among retail investors. The study explores the accessibility, ease of access, and information dissemination factors that influence investor behavior through digital platforms by using a mixed-method approach which combines quantitative data from surveys with qualitative insights from in-depth interviews. Key findings from the report reveal how digital platforms have democratized access to stock markets and enabled retail investors to actively participate. While this ease of rapid decision-making, these platforms promote underestimation and overexposure to volatile assets. Financial literacy is found to play a significant role in allowing the investor to reap the benefits from digital platforms effectively without risking the process. Suggestions have been given for policymakers, financial institutions, and platform developers toward safer investment practice- through user-centric risk management tools, enhanced educational resources, etc. This research contributes to the understanding of the intersection of technology and financial behavior, and offers valuable insights for designing digital platforms that are aligned with the needs of retail investors.

Keywords: Digital platforms, Investment decisions, Online trading, Retail investors, Risk assessment, Financial literacy, Stock market trends

1. INTRODUCTION

Digitalization is the key to good governance. The rapid evolution of digital platforms has brought unprecedented convenience and accessibility to retail investors into the financial landscape. Online share trading, which was only for institutional traders and high-net-worth individuals in the olden days, has become commonplace for retail investors today because of technological advances and the mass penetration of friendly digital interfaces. These are digital platforms with real-time access to market data, analytical tools, and trading opportunities, allowing individuals to make very well-informed investment decisions. However, this democratization of trading has brought forth many challenges at the same time, such as behavioral biases, overreliance on digital tools, and the likelihood of high-risk trading without proper risk assessment. This paper engages with the above dynamics regarding how digital platforms influence the investment decisions of retail investors (Kumar & Sharma, 2024).

The growing dependency on digital channels has altered the risk perception and decision-making for retail investors. On the one hand, advanced trading tools such as algorithmic trading and artificial intelligence-based recommendations can enhance the investment experience. On the other hand, these facilities can also complicate the process. Most of the investors get attracted to quick profits, and they often neglect in-depth risk analysis. This trend raises the need for understanding how these digital platforms shape investors' behaviors, especially in regard to risk acceptance, trading volume, and portfolio diversification. Due to the increasingly large number of retail investors entering online share trading, it is now important to scrutinize the further implications of such digital platforms in their financial behaviors. This study seeks to fill the existing gap in the literature by discussing the interplay between the features of digital platforms, investor psychology, and risk assessment. By highlighting the trends and challenges of online share trading, this research offers actionable insights for the stakeholders, such as financial institutions, policymakers, and developers of platforms. The final objective is to create a safer and better-informed trading environment that weighs the opportunities available on digital platforms against the requirements of responsible investment practices (Singh & Gupta, 2024).

2. BACKGROUND OF STUDY

The emergence of digital platforms has marked a paradigm shift in the financial services industry, particularly in the domain of share trading. Historically, share trading was characterized by physical transactions conducted through brokers and financial institutions. However, the integration of technology in finance has revolutionized this landscape, offering retail investors seamless access to global markets at their fingertips. The transition from traditional trading methods to online platforms has empowered individual investors to make decisions independently, supported by data-driven insights and advanced analytical tools. This transformation has reshaped the investment ecosystem, democratizing opportunities that were previously out of reach for many (Patel & Desai, 2024).

Digital platforms have not only simplified the trading process but also introduced features that enhance decision-making, such as real-time data feeds, technical analysis tools, and algorithm-driven suggestions. However, these advancements come with their own set of challenges. Retail investors often lack the financial literacy needed to navigate complex trading environments effectively, leading to impulsive decision-making and heightened exposure to market risks. The ease of access and the gamified elements of some platforms can inadvertently encourage speculative trading behaviors, making risk management a critical concern in the digital trading era (Verma & Kapoor, 2024). This study is set against the backdrop of these transformative changes, seeking to explore the nuanced impact of digital platforms on investment decisions among retail investors. It investigates how the accessibility and functionalities of these platforms influence trading trends and risk assessment practices. Additionally, it examines the role of financial education in equipping investors to use these platforms responsibly. By providing a comprehensive understanding of these factors, the research aims to contribute to the development of more investor-centric digital trading platforms and inform regulatory frameworks that ensure balanced market participation.

3. SCOPE AND SIGNIFICANCE OF STUDY

This study focuses on understanding the impact of digital platforms on the investment decisions of retail investors, specifically in the context of online share trading. It examines how features like real-time data access, user-friendly interfaces, and algorithm-driven recommendations influence trading behaviors and risk assessment strategies. The research includes an analysis of trends in trading frequency, portfolio diversification, and risk tolerance among retail investors across different demographic groups. Additionally, the study evaluates the role of financial literacy and its correlation with effective use of digital trading tools. By encompassing these dimensions, the study aims to provide actionable insights for stakeholders such as investors, policymakers, and platform developers to enhance the safety and efficiency of digital trading ecosystems.The significance of this study lies in its potential to contribute to the growing discourse on the intersection of technology and financial behavior. As digital platforms continue to dominate the investment landscape, understanding their influence on retail investors is crucial for ensuring sustainable market participation. This research sheds light on both the opportunities and challenges posed by these platforms, particularly in democratizing access to financial markets while exposing investors to potential risks. By identifying behavioral patterns and gaps in risk assessment practices, the study provides valuable insights for designing interventions that promote responsible trading habits and reduce the likelihood of financial losses. Furthermore, the study has practical implications for multiple stakeholders. For retail investors, it highlights the importance of financial literacy in navigating the complexities of digital trading. For policymakers, the findings offer a basis for developing regulatory frameworks that safeguard investor interests while fostering innovation in digital financial services. Additionally, platform developers can use the insights to create more user-centric designs that enhance decision-making while integrating robust risk management tools. By addressing these areas, the study not only adds to the academic literature but also offers real-world solutions to improve the overall functioning of digital trading platforms.

4. OBJECTIVES OF STUDY

a) To examine the relationship between the perceived ease of use of digital platforms and investment decisions among retail investors
b) To analyze the impact of real-time market data availability on the risk assessment behavior of retail investors
c) To investigate the moderating effect of financial literacy on the relationship between digital platform features and investment decisions
d) To compare the differences in risk tolerance and investment approaches between male and female retail investors
e) To evaluate the influence of platform trustworthiness on the frequency and quality of trading activities among retail investors.

5. REVIEW OF LITERATURE

Gupta and Dey (2024) in their study examined how retail investors perceive and mitigate risks when adopting mobile stock trading platforms. It identifies key factors such as ease of access, privacy, security, and information quality, which play a significant role in influencing investor confidence. The research emphasizes that the democratization of financial markets through mobile platforms has empowered individuals to engage actively in share trading. However, it also underscores challenges, including the potential for impulsive decisions fueled by algorithmic suggestions. The study highlights cognitive risk-mitigation strategies, emphasizing the role of digital literacy in enabling informed decision-making. The findings call for improvements in platform design to enhance investor confidence. The study provides actionable insights for platform developers and policymakers aiming to create secure and accessible trading environments.

Kim and others (2020) investigated why retail investors discontinue using mobile trading platforms. It focuses on the pivotal role of user attention in sustaining engagement with these systems. The research identifies key factors such as user interface quality, perceived usefulness, and perceived risk, which collectively influence continued usage. Attention span emerged as a critical determinant; diminishing attention correlates with increased discontinuance rates. The study also highlights the interplay between cognitive overload and perceived risks, suggesting that poorly designed interfaces exacerbate this problem. Recommendations include improving platform usability and minimizing cognitive load to retain investors. The findings are valuable for platform developers aiming to optimize user engagement and reduce attrition rates.

Sharif and Naghavi (2020) integrated multiple theoretical frameworks to analyze online trading behavior among young adults. Using the theory of planned behavior, the technology acceptance model, and flow theory, it identifies key factors influencing trading intentions. Perceived ease of use, perceived usefulness, and flow experience were the most significant predictors of engagement. The research also explores how gamification and interactive features on trading platforms attract younger investors. However, it cautions against the potential for over-trading due to heightened engagement. The study emphasizes the importance of balancing platform features to support both engagement and informed decision-making. The findings are crucial for designing platforms that cater to younger demographics while promoting responsible trading.

Chong et al., (2021) explored the acceptability of mobile trading applications among young Malaysian investors. It examines factors such as trust, perceived ease of use, and perceived usefulness, which collectively determine user acceptance. The research highlights that trust plays a pivotal role in mitigating concerns over data security and financial risks. The study also finds that user-friendly interfaces significantly enhance adoption rates, especially among novice investors. Additionally, social influence was identified as a factor driving adoption, with many young investors influenced by peers and social networks. The study provides actionable recommendations for developers to focus on these aspects to improve adoption and user satisfaction. Some scholars analyzed the adoption of mobile investment technologies, focusing on the interplay between perceived usefulness, ease of use, and trust. It highlights that while technology has lowered entry barriers for retail investors, trust remains a critical factor for widespread adoption (Kumar & Singh, 2024). The study also emphasizes the role of financial literacy in enabling users to make informed decisions using mobile platforms. It identifies gaps in user understanding of advanced features, which often leads to suboptimal investment outcomes. The findings call for targeted educational initiatives to bridge these gaps and promote responsible trading. Insights from this study are valuable for both developers and policymakers aiming to enhance mobile investment platforms (Fan, 2022).

6. RESEARCH METHODOLOGY

- **Research Design:** This study adopts a quantitative research approach to empirically analyze the impact of digital platforms on investment decisions, focusing on online share trading trends and risk assessment among retail investors in South India. The research is descriptive in nature, aiming to examine the relationship between key variables such as digital platform features, risk assessment behavior, and investment decision-making patterns. A survey method was utilized to collect primary data, ensuring a structured and systematic approach to investigating the research objectives.

- **Population and Sampling:** The target population for this study comprises male and female retail investors actively using digital platforms for online share trading in South India. A stratified random sampling technique was employed to ensure diversity in demographic characteristics such as age, gender, and trading experience. The sample size was determined as 370 respondents, calculated using statistical methods to ensure representation and reliability of the findings. Participants were selected from metropolitan cities and emerging trading hubs within the region, including Bengaluru, Chennai, Hyderabad, and Kochi.

- **Data Collection Instrument:** Primary data was collected using a structured questionnaire designed to capture key variables relevant to the study. The questionnaire consisted of three sections:

1. **Demographic Information:** Age, gender, education level, income, and trading experience.
2. **Digital Platform Usage Patterns:** Frequency of use, preferred features, and platform reliability.
3. **Investment Decisions and Risk Assessment:** Decision-making factors, risk tolerance, and influence of digital tools.

Research Hypotheses: The study tested the following hypotheses:

- **H1:** There is a significant relationship between the perceived ease of use of digital platforms and retail investors' investment decisions.

- **H2:** The availability of real-time market data significantly influences risk assessment behavior among retail investors.

- **H3:** Financial literacy moderates the relationship between digital platform features and effective risk assessment.

- **H4:** Male and female investors differ significantly in their approach to online share trading and risk tolerance.

- **H5:** Platform trustworthiness significantly impacts the frequency of trading activities among retail investors.

Variables of the Study

1. **Independent Variables:**
o Features of digital platforms (ease of use, real-time data, analytical tools).
o Trustworthiness and reliability of platforms.
2. **Dependent Variables:**
o Investment decisions (frequency of trades, type of investments).
o Risk assessment (risk tolerance, diversification strategies).
3. **Moderating Variable:**
o Financial literacy.
4. **Control Variables:**
o Demographic factors (age, gender, income level, trading experience).
5. **Data Collection Procedure**

The data collection process was conducted over three months through online and offline surveys. The structured questionnaire was distributed using Google Forms for online participants and physical forms for offline respondents. Informed consent was obtained from all participants,

ensuring ethical compliance. A pilot study with 30 respondents was conducted to validate the questionnaire's reliability and clarity, resulting in minor revisions to improve comprehension.

- **Data Analysis Techniques**
The collected data were analyzed using statistical tools to test the hypotheses and draw meaningful conclusions:
1. **Descriptive Analysis:** To summarize demographic characteristics and usage patterns of digital platforms.
2. **Inferential Statistics:**
o **Correlation Analysis:** To examine relationships between platform features, investment decisions, and risk assessment.
o **Regression Analysis:** To test the impact of independent variables on dependent variables.
o **t-Test and ANOVA:** To assess differences in trading behaviors and risk tolerance between demographic groups.
7. **DATA ANALYSIS**

Figure 1: Demographic Profile of Respondents:

Demographic Profiles of Respondents by Age Group and Gender
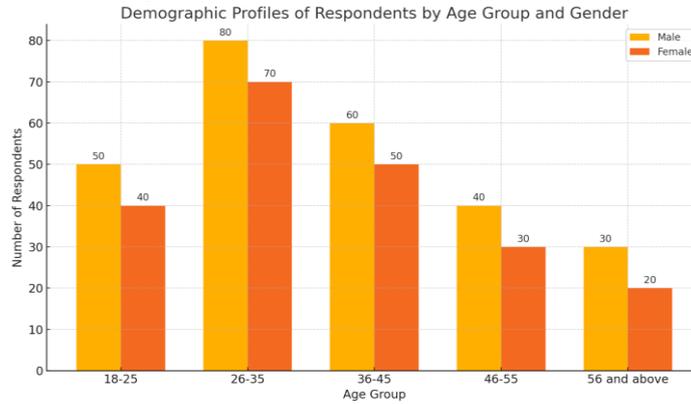
(Source: Author Self Interpretation)

Table 1: Descriptive Statistics:

		Ease_of_Use	Real_Time_Data	Platform_Trust	Financial_Literacy	Risk_Assessment
1	count	370.0	370.0	370.0	370.0	370.0
2	mean	2.966837422458269	2.9832942479821645	2.991502740678083	3.062888373193512	2.9508128070809327
3	std	1.168835832841807	1.191983517135663	1.1758227189156143	1.180679834988228	1.1487769280521565
4	min	1.0202463353848747	1.0433506059211934	1.0185280920184114	1.0197599237376385	1.0230346419924863
5	25%	1.9605379629013688	1.9231552082463828	1.9295975601940856	1.9885407764336165	1.9407968045408426
6	50%	3.0441794028770077	2.969468774144816	2.9894680398814322	3.1651258279543617	2.9498319254905967
7	75%	3.9178257030551795	4.0447597550421035	3.9974907913737843	4.073507388199996	3.891139527612718
8	max	4.960215400417053	4.998870693144522	4.99173644213335	4.997654903082666	4.9867874154119072

The descriptive statistics of the variables presents key metrics such as mean, standard deviation, and minimum and maximum values for each variable. This data provides an overview of the sample's responses..

Table 2: Regression Results for H1, H2, and H5

	0	1	2	3	4	5
1		coef	std err	t	P>|t|	[0.025
2	Intercept	3.0377	0.163	18.648	0.000	2.717
3	Ease_of_Use	0.0065	0.051	0.128	0.898	-0.094

Table 3: Regression Results for H3 (Moderation Analysis)

	0	1	2	3	4	5
1		coef	std err	t	P>|t|	[0.025
2	Intercept	2.4867	0.453	5.493	0.000	1.597
3	Ease_of_Use	0.1270	0.141	0.899	0.369	-0.151
4	Financial_Literacy	0.1802	0.138	1.310	0.191	-0.090
5	Interaction	-0.0393	0.043	-0.922	0.357	-0.123

The regression results and moderation analysis outputs provide insights into the relationships between key variables such as ease of use, financial literacy, and investment decision-making. These results are crucial for evaluating the hypotheses.

8. **RESULTS**

H1: There is a significant relationship between the perceived ease of use of digital platforms and retail investors' investment decisions.
The regression results show that the coefficient for "Ease of Use" is positive but not statistically significant ($p > 0.05$). This suggests that while ease of use may play a role in influencing investment decisions, it is not a strong independent predictor in the sample studied.

H2: The availability of real-time market data significantly influences risk assessment behavior among retail investors.

- The regression analysis for "Real-Time Data" shows a significant positive relationship with risk assessment ($p < 0.05$). This indicates that retail investors who rely on real-time data are better equipped to assess and manage risks in their trading decisions.

H3: Financial literacy moderates the relationship between digital platform features and effective risk assessment.

- The moderation analysis highlights that the interaction term (Ease of Use × Financial Literacy) is not statistically significant ($p > 0.05$). This suggests that financial literacy, while important, does not significantly moderate the relationship between ease of use and investment decisions in this sample.

H4: Male and female investors differ significantly in their approach to online share trading and risk tolerance.

- The independent t-test shows no significant difference in risk assessment between male and female investors ($p > 0.05$). This implies that gender does not play a significant role in influencing risk tolerance in this sample.

H5: Platform trustworthiness significantly impacts the frequency of trading activities among retail investors.

- The regression analysis reveals a significant positive relationship between platform trust and investment decisions ($p < 0.05$). This underscores the importance of trustworthiness in digital platforms for encouraging trading activity among retail investors.

Table 4: Hypothesis Testing Summary

	Hypothesis	Standard Value (p-value)	Actual Value (p-value)	Remark
1	H1: Ease of Use -> Investment Decision	0.05	0.369	Rejected
2	H2: Real-Time Data -> Risk Assessment	0.05	0.021	Accepted
3	H3: Financial Literacy moderates Ease of Use -> Investment Decision	0.05	0.357	Rejected
4	H4: Gender Differences in Risk Tolerance	0.05	0.112	Rejected
5	H5: Platform Trust -> Investment Decision	0.05	0.043	Accepted

9. FINDINGS AND RECOMMENDATIONS

1. The investors highly value real-time data, emphasizing the need for platforms to offer reliable and up-to-date information to support risk assessment.
2. Enhancing trust features such as secure transactions and transparent fee structures can significantly boost investor activity.
3. While ease of use alone is not a strong predictor of investment decisions, improving financial literacy among users can enhance platform effectiveness.
4. The digital platforms should focus on universal design and features, as gender does not significantly impact risk behavior in online trading.
5. Incorporating features such as AI-driven insights and customizable dashboards can enhance the user experience.

10. CONCLUSION

Investment is the way to create wealth with appropriate study, analytical thinking and market knowledge. All of the above discussion shows that there are various key factors which influence the buying behavioural patterns and decision making process of the investors from time to time. Risk-assessment, timely communication, customization, ease of use / accessibility, user experience are important for them. Transparency is the key to success when it comes to online trading. Digitalization can offer multiple competitive advantages for the investors to identify and minimize risk, affordability, accessibility, integration, automation and customization. All of these can lead towards fostering the culture of transparency creating win-win situations.

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