

Factors affecting Adoption of Investment Recommendation Apps for Investing in the Stock Market: An Empirical Study

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Abstract

Rapid adoption of mobile financial services has been witnessed by the digital age where mobile business applications are increasingly seen as private investor investments in stock market. This is mainly due to fundamental features of mobile trading apps. In previous days, stockbroker's advice, television and newspapers are the primary source of information for the investors which is now changed to trading apps and expert advice through social media apps like Instagram, LinkedIn, YouTube, etc. The study offers deep evaluation of the way the consumers use online apps to invest in the stock market. Mobile Trading Apps (MTA) provides securities, funds and financial information which is followed by "app recommendation, expert ratings and fund ratings" to support the decision. 332 stock market investors were surveyed to explore the factors affecting Adoption of Investment Recommendation Apps for Investing in the Stock Market. Significant impact of Adoption of Investment Recommendation Apps on Investing in the Stock Market is found by the study results.

Keywords: Adoption, Investment, Stock Market, Applications, Mobile Trading.

Introduction

Efficient investing environment is developed in the stock market where the securities market growing slowly and, attracting the investor's attention. The key aim of the stock trading is to make money by purchasing and selling shares in the stock market (Devi et al., 2023). It is easy to make investments through MTA as it facilitates the accesses anytime and anywhere along with "market updates, analysis tools, commission free services, bill payments, and personalized recommendations". Large number of opportunities to create the wealth and have well-informed decisions are offered by MTA. The investor's behaviour towards the investment decision is reshaped by the evolution of technology adoption in the financial market. This makes it important for both the financial institutions and investors to explore the interaction amid "the MTA and investor perception and utilization". A lot of information, expertise, and interaction with stock brokers are required while purchasing and selling the stocks (Mittal et al., 2025). A variety of investment options (offline and internet investing) are offered by the stock market. The data of the stock market is complicated and keeps on changing which makes it tough to forecast the market (Jishag et al., 2020). Internet and web came together to form an online commerce platform where a place is given to the users to buy and sell their goods and services and get the information about the stocks. Along with this there are mobile applications on which the users are able to get the details, buy and sell their products and services as well. In the study of Khanna (2026) it is found that MTAs are playing crucial role in encouraging retail participants. It also reduces the entry barriers with the vital factors like ease of use, affordability, and digital onboarding. Now a days, investing is very easy for the young and inexperienced investors due to "Interface design, simplified workflows, and integrated payment and KYC systems". Factors like social influence and trust are significantly influencing the way the mobile stock trading applications are chosen by the individual investor for their investments. "Social impact strategies, transparency, and top-notch customer service" are some of the vital

factors on which the companies must focus to encourage the adoption of mobile apps (Hermanto and Napitupulu, 2023). In the financial industry, it is important to use the financial technology or Fintech which in turn help to switch from traditional services to online or digital mode of using finances (Das and Ali, 2020). The key forecasters of technology acceptance are “perceived usefulness (PU), perceived ease of use (PEOU), and behavioral intention (BI)”. It is important to understand these factors which in turn helps to develop effective strategies and encourage the distributors to accept the digital services. When it comes to “consumer acceptance, and perception of usefulness”, trust is important in the case where the human interaction is less in digital services. Along with this, it is important for the consumers to accept “digital distribution channels” due to insufficient physical interaction in the services offered by the channels of Mutual Fund Brokers. This is usually for the users that have low trust level in the initial stages due to “lack of experience or social presence” (Bourne, 2020). Gender, and educational qualification of investors shows no effect on the investor to prefer mobile apps for trading. On the other hand, the preference for MTA is significantly affected by “age, occupation, and income” of the investor. It is also found that there is moderate effect of “App recommendation, Ratings, Ease of use, Personalization and perceived information” on individual investor’s investment decision (Amudha and E., 2024). The investors’ intentions to use trading apps is significantly influenced by “practical value, effort expectancy, social influence, hedonic motivation, trust, information richness, privacy concerns, facilitating conditions, and personal innovativeness in IT (Information technology)”. The behavioral intention of the investor is influenced by these factors which in turn facilitate the relation amid different constructs and focus on complicated roles that shapes the perception of the user (Amin et al., 2024). It inspires the search of different financial services to have a good sympathetic of adoption dynamics. “User intentions, privacy concerns, and information richness” are some of the crucial factors affecting the adoption of MTAs (Wang & Qi, 2021). It is important for the researchers and practitioners both to have good understanding of the factors that affects the intentions of adopting MTAs. It is necessary for the financial organization and app developer to understand the factors that affects the “behavioural intention” of the users to adopt mobile trading applications which in turn helps in improving the user engagement and encourage them for technology adoption (Penney et al., 2021). Previous studies have integrated the “Unified Theory of Acceptance and Use of Technology model” along with other constructs like “privacy concerns and information richness” developing a complete outline to examine the determinants of the adoption of MTA. The digital platforms offer “convenience, cost-effectiveness, and enhanced user experience” which also includes “real time data, AI-powered insights, and comprehensive educational resources” which made the investing process more accessible and easier. This also fosters the society which is inclusive and financially aware as well with the people who can visit (Uma, 2025).

Literature Review

Singh and Malhotra (2016) investigated the demographic factors that affects the behaviour of the inventors to adopt online trading. The investigators also determine the success and resistance factors that influence the online trading adoption. It is found that there is no impact of “home ownership, income, trading experience, marital status, age, gender, education, type of trade, trading frequency and occupation” on adoption of online trading. At the same time, adoption of online trading is not directly influenced by perceived benefit and perceived risk as well.

Parkash et al. (2014) after observing different socio-economic factors like “income, age, gender, occupation, education and marital status on risk taking behaviour of the individual” revealed that there no relation amid the “gender and risk-taking ability of an individual”. At the same time, the “risk-taking ability of an individual investor” is affected by “marital status, higher education and income of individual”.

Nair et al. (2022) studied the effect of MTA on investment decisions of a retail investor while investing in stock and mutual funds. The key focus of the study to know the way the mobile technology is applied on mobile apps by the investors of retails sector for online trading in the developing financial market. It is found that the key determinants of the behavioral intention of using mobile apps by the investors of retail sector for online trading are “effort expectancy, performance expectancy followed by perceived return”. In addition, the adoption behaviour of investors towards mobile apps is determined by the habit of investors. It is also found that for retail investors, perceived return is more important aspect in comparison to perceived risk.

Kishan and Venugopal (2024) found in their study that there is a strong impact of user's knowledge of online apps on adoption of online stock trading programs. It is more adopted by the users having the knowledge regarding "advantages and investment possibilities, integrity, security, characteristics connected to risk, knowledge of finances, and technological perspective". Economic expansion is encouraged by the stock market and it also relieves the financial limitations. The stock market liquidity decreases the investments risks where it enables to make changes in the portfolios in order to avoid the losses.

Agrawal and Mishra (2026) found that convenience, accessibility, and user-friendly features of the mobile trading and investment applications make them popular among young investors. The young generation is encouraged to take part in online investing by the rapid growth of smartphones, internet services, and digital financial platforms. The investment activities are get simplified by the apps like "Groww, Zerodha Kite, and Angel" making financial market easier to access to the investors investing first time in the market. The adoption is strongly affected by "ease of use". Features like simple, efficient, and convenient attract the young investors more along with trust and security which helps in building confidence. The adoption decision is strongly affected by the concerns like "cyber fraud, privacy, and financial risks" which makes it important to have secure digital investment systems.

Kasemharuethaisuk and Samanchuen (2023) revealed that there is significant impact of "perception of the usefulness of these services" on the intention of an individual investor to sue services of online investments. In addition, there is significant impact of convenience, trust, and subjective norm on investor's intention. It is also found that there is no impact of "perceived ease of use" on investor's intention.

Amudha (2024) investigated the influence of "MTAs on investment decision of individual investors" where the study focussed on the impact of "App recommendations, ratings, Ease of use, personalization and Perceived information" on investment decision. It is found that the male of the age group of 26 to 35 years earning from Rs.300001-600000 are more likely to prefer this MTA. It is found that when it comes to mutual funds monthly investment is preferred by the investors where they consider "price of investment, historical returns, Company performance and risk level". The study also reveals that there is moderate influence of "app recommendation, Rating, Ease of use, Personalization and perceived information" on investment decision of individual investors.

Objective

1. To explore the factors affecting Adoption of Investment Recommendation Apps for Investing in the Stock Market.
2. To measure the impact of Adoption of Investment Recommendation Apps on Investing in the Stock Market.

Methodology

332 stock market investors were surveyed to explore the factors affecting Adoption of Investment Recommendation Apps for Investing in the Stock Market. The study also measured the impact of Adoption of Investment Recommendation Apps on Investing in the Stock Market. "Random sampling method" and "Exploratory Factor Analysis" followed by "Multiple Regression Analysis" are used.

Findings

Male are 56.3 and rest 43.7% are females. 24.7% among them are below 35 years of age, 47.9% are in the age group of 35-45 years, and rest 27.4% are above 45 years of age. 24.7% are personal investors, 28.9% are angel investors, 23.8% are venture capitalists, and rest 22.6% are institutional investors.

“Table 1 General Details of Respondents”

“Variables”	“Respondents”	“Percentage”
Gender		
Male	187	56.3
Female	145	43.7
Total	332	100
Age		
Below 35 years	82	24.7
35-45 years	159	47.9
Above 45 years	91	27.4
Total	332	100
Kind of investor		
Personal Investors	82	24.7
Angel Investors	96	28.9
Venture Capitalists	79	23.8
Institutional Investors	75	22.6
Total	332	100

“Exploratory Factor Analysis”

“Table 2 KMO and Bartlett's Test”

“Kaiser-Meyer-Olkin Measure of Sampling Adequacy”		.796
“Bartlett's Test of Sphericity”	“Approx. Chi-Square”	5128.776
	“df”	120
	“Sig.”	.000

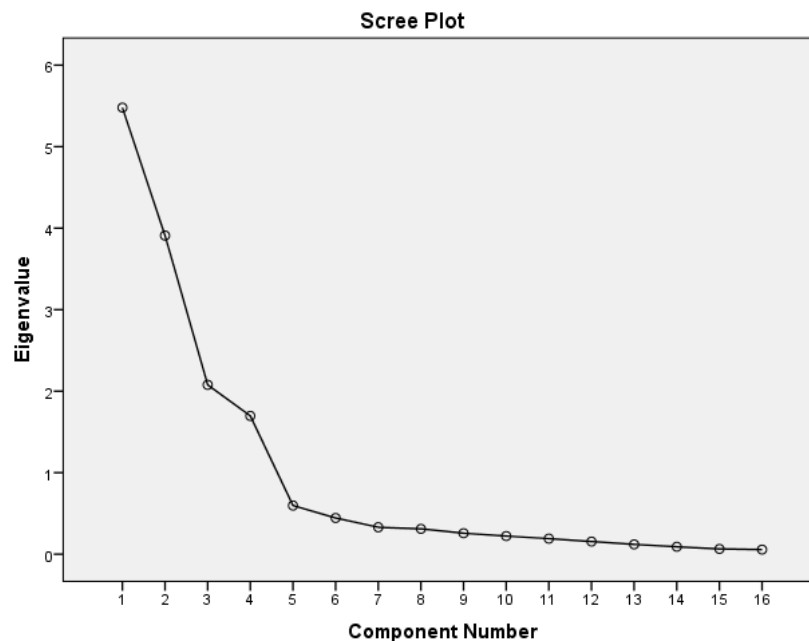
“KMO value” is 0.796 and the “Barlett’s Test of Sphericity” is significant.

“Table 3 Total Variance Explained”

“Component”	“Initial Eigen values”			“Rotation Sums of Squared Loadings”		
	“Total”	“% of Variance”	“Cumulative %”	“Total”	“% of Variance”	“Cumulative %”
1	5.479	34.243	34.243	3.594	22.464	22.464
2	3.909	24.431	58.674	3.375	21.096	43.560
3	2.077	12.984	71.658	3.102	19.390	62.950
4	1.696	10.599	82.257	3.089	19.307	82.257
5	.597	3.728	85.986			
6	.444	2.776	88.762			
7	.330	2.062	90.823			
8	.311	1.941	92.765			
9	.257	1.605	94.370			
10	.222	1.390	95.759			
11	.191	1.192	96.952			
12	.155	.971	97.923			
13	.120	.750	98.673			
14	.091	.568	99.240			

15	.065	.403	99.644			
16	.057	.356	100.000			

In a “principal component analysis”, 16 variables were grouped into 4 factors with 22.464%, 21.096%, 19.390% and 19.307% variance respectively and total variance is 82.257%.



“Figure 1 Scree plot of Eigen Values”

Figure 1 shows the “Eigenvalues” derived from the "Total Variance Explained" table, indicating an elbow point at 4 components.

“Table 4 Rotated Component Matrix”

“S. No.”	“Statements”	“Factor Loading”	“Factor Reliability”
	Social Influence		.961
1	Recommendations from social circle encourages the adoption	.928	
2	User decision is influenced by Online reviews and ratings	.923	
3	Awareness and credibility are increased by discussions on social media	.923	
4	Community of investors promotes app usage	.904	
	Perceived Usefulness		.935
5	Users are attracted by accurate stock recommendations and market insights by apps	.943	
6	Helpful in making quick informed decisions	.909	
7	Helpful in improving portfolio management and investment performance	.871	
8	Helps in better market research	.859	
	Ease of Use		.902
9	Simple and user-friendly nature of the app encourages adoption	.871	

10	Easy navigation is helpful in quick access to information	.849	
11	App can be operated even with minimum technical knowledge	.842	
12	User experience is enhanced by smooth onboarding process	.823	
	Trust and Security		.897
13	Investor confidence is increased due to Strong data protection measures	.900	
14	Secure payment and transaction system encourages the use of app	.853	
15	Credibility is increased by transparent recommendation algorithms	.853	
16	Trust is influenced by positive reputation of the app	.804	

Factor “Social Influence” includes the variables like Recommendations from social circle encourages the adoption, User decision is influenced by Online reviews and ratings, Awareness and credibility are increased by discussions on social media, Community of investors promotes app usage. Factor “Perceived Usefulness” consist of variables like Users are attracted by accurate stock recommendations and market insights by apps, Helpful in making quick informed decisions, Helpful in improving portfolio management and investment performance, Helps in better market research. Factor “Ease of Use” includes the variables like Simple and user-friendly nature of the app encourages adoption, Easy navigation is helpful in quick access to information, App can be operated even with minimum technical knowledge, and User experience is enhanced by smooth onboarding process. Factor “Trust and Security” includes the variables like Investor confidence is increased due to Strong data protection measures, Secure payment and transaction system encourages the use of app, Credibility is increased by transparent recommendation algorithms, and trust is influenced by positive reputation of the app.

“Table 5 Reliability Statistics”

“Cronbach's Alpha”	“N of Items”
.866	16

“Table 6 Model Summary”

“Model”	“R”	“R Square”	“Adjusted R Square”	“Std. Error of the Estimate”
1	.755 ^a	.570	.564	.57768
Predictors: (Constant), “Social Influence, Perceived Usefulness, Ease of Use, and Trust and Security”				

0.564 is “adjusted R-squared value” with approx. 57% of the variation.

“Table 7 ANOVA”

	“Model”	“Sum of Squares”	“df”	“Mean Square”	“F”	“Sig.”
1	“Regression”	144.392	4	36.098	108.168	.000 ^b
	Residual	109.126	327	.334		
	Total	253.518	331			
DV: Overall impact of Adoption of Investment Recommendation Apps on Investing in the Stock Market						
Predictors: “Social Influence, Perceived Usefulness, Ease of Use, and Trust and Security”						

Value under significant column indicates a significant relationship between the factors namely “Social Influence, Perceived Usefulness, Ease of Use, and Trust and Security” and Investing in the Stock Market.

“Table 8 Coefficients”

“Model”	“Un standardized Coefficients”		“Standardized Coefficients”	“t”	“Sig.”
	“B”	“Std. Error”	“Beta”		
(Constant)	3.602	.032		113.624	.000
Social Influence	.089	.032	.102	2.808	.005
Perceived Usefulness	.068	.032	.078	2.145	.033
Ease of Use	.067	.032	.076	2.096	.037
Trust and Security	.647	.032	.740	20.391	.000
DV: Overall impact of Adoption of Investment Recommendation Apps on Investing in the Stock Market					

All the factors “Social Influence, Perceived Usefulness, Ease of Use, and Trust and Security” are showing significant impact of Adoption of Investment Recommendation Apps on Investing in the Stock Market. Trust and Security is showing highest impact .740 then Social Influence (.102), Perceived Usefulness (.078), and Ease of Use (.076).

Conclusion

In India, the financial landscape is shaped again by the arrival and widespread of adoption of online investment applications for the young investors. The shift is observed in the avenues of traditional savings which are changed to current investment options like “equities, mutual funds, and cryptocurrencies”. This highlights the craving for high returns and creation of long-term wealth. There is a great contribution of digital platforms in “democratizing access to investments, breaking down historical barriers such as high minimum thresholds and limited access to specialized financial products”. Now a days the investing process is more accessible due to “convenience, cost-effectiveness, real time data, AI-powered insights, comprehensive educational resources and enhanced user experience” which empowers broader demographic as well. Continuous research and proactive initiatives are necessary for cultivating a strong financial ecosystem supporting the constant wealth of young investors in India and all over the world as well. This is possible by the use of transformative power of “digital investment technologies”. Significant acceleration is observed in “investor’s intention to use MTAs” by introducing digital medium and apps development. These MTAs helps everyone to invest from anywhere of the world at any time. The study aims to explore the factors affecting Adoption of Investment Recommendation Apps for Investing in the Stock Market. The study also measured the impact of Adoption of Investment Recommendation Apps on Investing in the Stock Market. It is found that “Social Influence, Perceived Usefulness, Ease of Use, and Trust and Security” are the factors that affects the Adoption of Investment Recommendation Apps. Significant impact of Adoption of Investment Recommendation Apps on Investing in the Stock Market is concluded by the study results.

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