



# A Study On The Adoptability Of Mobile Trading Applications Among Young Investors In Southern Kerala.

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## ABSTRACT

The digital age has seen a rapid adoption of mobile financial services. The stock market has seen an upsurge in private investor investments, particularly in mobile business applications. These mobile trading apps' fundamental features are responsible for this. The majority of individuals used to follow the advice of stockbrokers or reliable acquaintances, with television and newspapers serving as their primary information sources. Presently, the situation is entirely different: those who trade stocks receive regular updates via their "trading apps" or expert advice via social media apps like Instagram, LinkedIn, YouTube, etc. The goal of this study is to offer a thorough evaluation of how consumers use online applications for stock market investing.

## Introduction

The stock market has developed into an efficient investing environment. The securities market gradually grew, attracting the attention of investors. Making money by purchasing and selling shares on the stock market is the aim of stock trading (Devi, I. V., Natarajan, B., Prabu, S.,2023). In the constantly shifting financial landscape, for those who are looking to get richer, the stock market is still a helpful and appealing option. Buying and selling stocks used to involve a lot of information, expertise, and interaction with stockbrokers. Buyers and sellers gather at the stock exchange to trade shares of a stock business. The stock market offers a variety of investment options, including both offline and internet investing. Since stock market data is complex and constantly changing, stock market forecasting is by its very nature difficult (Jishag, A. C & Thara, S.,2020). An online commerce platform is formed by the internet and the web combined. An online store gives computer users a place to purchase and sell goods and services as well as obtain information about them. Furthermore, mobile phone users can obtain details about products and services, make online purchases, and transact business through M-commerce, a subset of e-commerce.

Using a few securities exchange websites, virtual trading is a web-based stock exchange environment architecture. Investors can easily look for and trade equities by using stock trading programs on the mobile platform. The portable platform is compatible with a range of mobile devices, including smartphones and tablets, enabling internet access. Not conventional desktop or laptop PCs, but rather extremely portable devices like smartphones and tablets, are the main ways to access the internet globally. Numerous mobile stock market applications are available on the mobile platform. Customers can invest in the stock market via mobile apps offered by well-known organizations as Upstox, Zerodha, ICICI direct Market, Kite, Motilal Oswal, Angle Broker, and 5paisa online shopping apps. Buying, selling, updating, and managing your investments on the trading platform are all made simple using the Exchange App, an online platform. Investors can view online stock and asset trading transactions by using the online stock market application on their smartphones. A smartphone-based technology stack is the most recent and advanced development in Internet infrastructure that enables wireless devices, such as tablets, PDAs, cell phones, and cell phones, to offer social media and content instantaneously using a mobile browser. The discipline of behavioural finance challenges the assumptions of classical finance theory by arguing that investors' judgments are not always rational (M. A. Nair, Balasubramanian and L. Yermal,2017). The capital market has been affected by on-demand access; the most recent research reveals that cellular web browsing is being used by customers and vendors for communication, analysis, and trading. In fact, thirty percent of Vanguard's clientele routinely use mobile devices to access their trading accounts.

Exchange participants can now wirelessly access financial product data, analyse it, and trade it in real time thanks to mobile network technology. This efficient method of using the wireless Internet to obtain stock

market information can lead to cheaper search, trading, and information distribution expenses. The Indian stock market achieved the three-billion-dollar level in 2021. The financial markets attribute this investment member's success to the development of new technology. The Indian stock market has undergone a transformation thanks to trading and investing via online mobile apps. Using an online trading application, this study attempts to investigate stock market investment.

With the use of internet applications, stock market investment is now more convenient and accessible thanks to the financial industry's transformation brought about by technology's explosive expansion. But even with these platforms' increasing popularity, financial players still have a significant difficulty in comprehending consumer adoption behaviour.

The difficulty lies in comprehending the elements affecting customers' decision-making procedures and the obstacles they encounter when using online programs to invest in the stock market. Finding the important factors influencing consumers' use of internet-based applications for the investment industry was the aim of this study.

In brief, this study aims to offer a comprehensive evaluation of how individuals use online securities market investing applications. Through an analysis of the factors and barriers influencing user choices, we want to create a more informed and welcoming investing environment, increasing the prospects for empowerment and economic progress in the age of technology.

### Objectives

- To determine the public's level of awareness regarding online share trading programs.
- To investigate the positive aspects and investment decisions made by people using online share trading applications to invest within the securities exchange.
- To evaluate the risk, safety, and dependability of stock market investment using online share trading software.
- To assess technical proficiency and financial awareness in relation to using online share trading programs.
- To investigate how people are adopting online share trading programs and investing in the stock market.

### Literature Review

Chong (2021) conducted a study examining the reception of mobile stock trading applications among Malaysian youth investors. This study looks at young investors' intentions to use mobile stock trading. The study's empirical findings demonstrate that views, perceptions regarding conduct control, and benefits all have a favourable impact on the use of mobile stock trading apps. Out of the three variables, views have the most impact, which is followed by believed advantages and behavioural regulation.

Suzanee Malhotra (2020) did a study, regarding the characteristics of mobile trading apps. It aims to highlight the significance of certain key elements for customers by conducting a qualitative evaluation of the mobile trading applications of well-known brokerage firms.

Parvathy S. Nair, Atul Shiva, Nikhil Yadav, Priyanka Tandon (2022) examined the factors of mobile apps that affected the uptake by ordinary investors for trading online. The study demonstrates that the primary factors influencing retail investors' behavioural intentions to use mobile applications for e-commerce were anticipated effort, projected outcome, and predicted return. Additionally, investor adoption behaviour for mobile applications was influenced by their investment behaviours. In addition, the study discovered that return is a more relevant factor to private investors than the risk that they perceive.

Julius Hermanto, Togar Alam Napitupulu (2023) did a study on the influential factors that impact the choice of a mobile application for stock trading. The aim of this study was to determine the aspects that influence a user's selection of mobile stock trading software and their usage of it. Of the seven variables that were studied, it was shown that trust and social influence had the greatest influence on the user's intent to use, while intention to use and trust had the highest effects on a user's behaviour.

### Research Methodology

This study is descriptive in character and employs analytical methods. Data from the respondents was gathered using an appropriate questionnaire. To collect the data, an internet-based survey was used. Six distinct concepts were employed in the questionnaire: understanding of e-commerce apps, rewards and investment alternatives, safety and risk-related variables, confidence in finances, technological components, and adoption behaviour. A total of 26 declarative questions were used in the survey. Convenience sampling, a kind of non-probability sampling, was used to gather data. 550 participants in all took part in the poll and provided insightful comments. We got informed consent from every study participant. The survey participants were apprised of the confidentiality of the data and were guaranteed its usage for research reasons. But since the goal of the study was to utilize a quantitative approach to examine user behaviour in a stock market application, ethical approval was not needed for this particular investigation. SPSS was used to evaluate the data collected

for this study. Regression evaluation, analysis of correlation, testing of reliability, and descriptive evaluation were used to investigate the data.

### Analysis

The data gathered for this investigation has been examined using SPSS. The information collected were looked over using descriptive analysis, regression analysis, reliability tests, and correlations.

#### 1. Demographic profile

The respondents' demographic information is listed in Table 1. Of the 550 repliers, 210 (38.2%) were female and 340 (61.8%) were male. Of the total respondents, 250 (45.4%) were under the age of 18–24, while 300 (54.5%) were between the ages of 25 and 30. Groww App is used by 210 respondents (38.2%), Upstox App by 180 respondents (32.7%), and Zerodha App by 160 respondents (29.1%). 240 respondents (43.6%) do engage in online trading in a daily basis, 140 respondents (25.5%) do engage in online trading in a monthly basis, 100 respondents (18.2%) do engage in online trading in a weekly basis and only 70 respondents (12.7%) do engage in online trading rarely. All these demographic factors are excellent indicators for our analysis.

For every variable, the mean and standard deviation were computed. The mean value has been obtained applying the following formula.

$\mu = (\Sigma X)/n$ , where,

$\Sigma X$  = Sum of all values in the dataset X,

“n” = Total number of observations.

The standard deviation values for each of the five variables were then calculated using the following formula:

$\sigma = \sqrt{[(\Sigma (X - \mu)^2) / n]}$ , where

$\Sigma (X - \mu)^2$  = The total of the squared deviations between the mean ( $\mu$ ) and each value (X) in the dataset.

“n” = The overall number of observations.

**Table 1: Demographic analysis**

Variable	Category	Frequency	Percentage
Age	18-24	250	45.4%
	25-30	300	54.5%
Gender	Male	340	61.8%
	Female	210	38.2%
Apps	Groww	210	38.2%
	Upstox	180	32.7%
	Zerodha	160	29.1%
Usage	Daily	240	43.6
	Weekly	100	18.2%
	Monthly	140	25.5%
	Rarely	70	12.7%

**Table 2: Descriptive statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
Awareness	550	2.37	4	3.384	0.486
Benefits and preferences	550	2.58	4	3.645	0.772
Safety, reliability and risk factors	550	1.62	4	3.813	0.816
Financial Literacy	550	2	4	3.358	0.857
Technical Aspect	550	3	4	3.971	0.894

#### 2. Reliability test

An intrinsic coherence examination of the constructs was conducted using Cronbach's alpha reliability analysis. Cronbach's alpha is generally recognized to be 0.70 or above, while acceptable levels can vary based on the situation and the measurement tool's intended use. If the reliability coefficient falls below the desired threshold, consider removing or revising items to improve intrinsic coherence.

With SPSS, each concept's dependability was assessed. Table 3 provides a summary of each concept's dependability along with its interpretations. Each variable has a value of at least 0.80 for Cronbach's Alpha. When the data fell between 0.806 and 0.894 on the Cronbach's alpha scale, it was considered extremely dependable and internally coherent.

This suggests that the data collection scale was appropriate and accurate enough for the study.

**Table 3: Reliability analysis**

Constructs	N	No: of items	Cronbach's Alpha	Internal Consistency
Awareness	550	3	0.806	Good
Benefits and preferences	550	4	0.806	Good
Safety, reliability and risk factors	550	3	0.807	Good
Financial Literacy	550	3	0.854	Good
Technical aspect	550	6	0.894	Good
User's adoption behaviour	550	3	0.885	Good

### 3. Correlation analysis

The following formula was used to determine the correlation.

$r = (\Sigma [(X_i - \bar{X}) * (Y_i - \bar{Y})]) / [\sqrt{(\Sigma (X_i - \bar{X})^2)} * \sqrt{(\Sigma (Y_i - \bar{Y})^2)}]$  where:  $X_i$  and  $Y_i$  = Individual data points for variables X and Y, respectively.

**Table 4: Correlation analysis**

	AW	BP	SRR	FL	TA	UAB	p value
AW	1						0.000
BP	0.542456278	1					0.000
SRR	0.458784832	0.529554479	1				0.000
FL	0.733154623	0.301632574	0.419855214	1			0.000
TA	0.728907285	0.383794613	0.483963628	0.785794879	1		0.000
UAB	0.382361428	0.523976431	0.587731982	0.489615362	0.364093503	1	0.000

\*\*Correlation is significant at the 0.01 level (2-tailed)

$\bar{X}$  and  $\bar{Y}$  = The means of variables X and Y, respectively

The relationship between the independent and dependent variables is shown in Table 4. The correlation analysis revealed significant relationships between users' adoption behaviour and awareness of online applications ( $r(550) = 0.38, p < .05$ ), benefits & preferences ( $r(550) = 0.52, p < .05$ ), safety, reliability, and risk-related factors ( $r(550) = 0.58, p < .05$ ), financial literacy ( $r(550) = 0.48, p < .05$ ), and technical aspect ( $r(550) = 0.36, p < .05$ ).

### 4. Bivariate regression analysis

The study included six manipulated variables (awareness of online apps, benefits & choice of investment, reliability, safety, risk-related aspects, financial literacy, technical aspect, and dependency) and one dependent variable (users' adoption behaviour). Bivariate regression analysis was performed using the following method to account for the potential of multicollinearity and perform individual regression coefficient analysis:

#### Regression Model Specification:

$$UAB = \beta_0 + \beta_1 AW + \beta_2 BP + \beta_3 SRR + \beta_4 FL + \beta_5 TA + \epsilon$$

UAB = Users' adoption behaviour

$\beta_1$  AW = Awareness of Online Applications

$\beta_2$  BP = Benefits & preferences

$\beta_3$  SRR = Safety, Reliability and risk- factors

$\beta_4$  FL = Financial literacy

$\beta_5$  TA = Technical aspect

$\beta_0$ : Intercept (constant term).

$\beta_1(i = 1, 2, 3, 4, 5)$  Slope (coefficient of the independent variables).

$\epsilon$ : Error term (residuals).

**Table 5: ANOVA - Analysis of variance**

	Model	Sum of squares	Df	Mean square	F	Sig
1	Regression	383.202	1	383.202	804.078	0.000
	Residual	261.162	548	0.477		
	Total	644.364	549			
2	Regression	181.133	1	181.133	214.279	0.000
	Residual	463.231	548	0.845		
	Total	644.364	549			
3	Regression	314.219	1	314.219	521.565	0.000
	Residual	330.145	548	0.602		
	Total	644.364	549			
4	Regression	383.480	1	383.48	805.519	0.000
	Residual	260.884	548	0.476		
	Total	644.364	549			
5	Regression	202.956	1	202.956	251.967	0.000
	Residual	441.408	548	0.805		
	Total	644.364	549			

**Table 6: Coefficients regression models**

Coefficients	Raw Coefficients		Beta Coefficients		t	Sig
	B	Std. Error	Beta			
(Constant)	1.011	0.094			10.81	0.000
Awareness of online applications	0.819	0.029	0.771		28.36	0.000
Benefits & preferences	0.53	0.036	0.53		14.64	0.000
Safety, reliability & risk factors	0.687	0.03	0.698		22.84	0.000
Financial literacy	0.82	0.029	0.771		28.38	0.000
Technical aspect	0.598	0.038	0.561		15.87	0.000

Table 5 presents the ANOVA for each of the five regression indicator models, whereas Table 6 presents the regression models' coefficients. Using an ANOVA model, the link between the models for all variables was assessed.

### 5. Testing of hypothesis

H1: Being aware of such applications by users affects their adoption behaviour.

H2: The advantages and investment decisions made for these kinds of applications have an impact on users' adoption behaviour.

H3: Factors connected to safety, danger, and trustworthiness have a big influence on how consumers adopt.

H4: Knowledge of finances affects how users adopt emerging technologies.

H5: Users' attitude towards adoption is influenced by their awareness of technical elements.

The relation between the predicted variables and manipulated variables had been established by inspecting each predictor independently.

The acceptance of H1 was based on the regression results, which showed that "awareness of online applications" was an influential factor in the model ( $R^2 = 0.595$ ,  $F(1, 548) = 804.078$ ,  $p = .000$ ).

H2 was approved based on the regression results, which showed that "benefits & preferences" ( $R^2 = 0.281$ ,  $F(1, 548) = 214.279$ ,  $p = .000$ ) was an important factor in the model.

H3 was approved since it was discovered that "safety, reliability, and risk-factor" ( $R^2 = 0.488$ ,  $F(1, 548) = 521.565$ ,  $p = .000$ ) was an important variable in the model.

H4 was approved since it was discovered that "financial literacy" ( $R^2 = 0.595$ ,  $F(1, 548) = 805.519$ ,  $p = .001$ ) was a significant factor in the model.

H5 was approved since it was discovered that the "technical aspect" ( $R^2 = 0.315$ ,  $F(1, 548) = 251.967$ ,  $p = .000$ ) was an influential factor in the model.

A brief overview of the results is provided in Table 7

**Table 7: Hypothesis Results**

Hypothesis	Regression weights	Beta coefficient	$R^2$	F	p value	Hypothesis result
H <sub>1</sub>	AW → UAB	0.819	0.595	804.07	0.000	Accepted
H <sub>2</sub>	BP → UAB	0.530	0.281	214.27	0.000	Accepted
H <sub>3</sub>	SRR → UAB	0.687	0.488	521.56	0.000	Accepted
H <sub>4</sub>	FL → UAB	0.820	0.595	805.51	0.000	Accepted
H <sub>5</sub>	TA → UAB	0.598	0.315	251.96	0.000	Accepted

- i. Dependent Variable: Users' adoption behaviour
- ii. Predictors: Awareness of online applications, (Constant)
- iii. Predictors: Benefits & preferences, (Constant)
- iv. Predictors: Safety, reliability and risk factors, (Constant)
- v. Predictors: Financial literacy factors, (Constant)
- vi. Predictors: Technical aspect factors, (Constant)

### Findings

This study looks at how online stock trading applications are affected by awareness, utility, and investment selection, as well as reliability, security, risk-related aspects, knowledge of finance, technological perspective, and adoption behaviour. The study's findings indicate that these factors have a major impact on how internet



business apps are used. A descriptive statistical examination indicates that each of the five independent criteria has a significant impact on how often these kinds of apps are used. Every variable's mean is in proximity to the fourth Likert point scale. Consequently, this suggests that every variable is present at a "suitable" level.

The greatest significant standard deviation, 0.894, indicates the usage of online 'tock trading apps. Conversely, the awareness standard deviation is the lowest at 0.486%. The data had extremely high standards of dependability and consistency within, according to Cronbach's alpha analysis. The correlation study's findings indicated that There existed a noteworthy and advantageous association among the factors being studied. The use of e-commerce applications is highly impacted by all five variables, as seen by the regression results. The survey's findings indicate that individuals are conscious about the numerous internet trading tools and programs accessible for stock trading. They are aware of how to open Accounts for trading via the internet for securities trading and how to use these accounts appropriately in the marketplace. Investors gather information on stocks from a variety of sources, including periodic updates from the National Stock Exchange and Bombay Stock Exchange, magazines, the financial sector, publications, social networking sites, websites of brokerage firms, and the advent of the internet.

Individuals receive up-to-date knowledge regarding investment and stock market awareness. The public's awareness of internet business initiatives is influenced by their investment inclinations. Unfavourable attitudes toward stock investing impact people's knowledge of online trading applications. Businesses now have the chance to go from traditional digital to online mobile operations thanks to the Internet, and investment schemes have altered the securities market in India.

Instantaneous transactions are another benefit of online business software. The clients believe that utilizing electronic trading applications is a safer and more dependable way to trade. Using online trading applications to trade stocks carries no risk. People also think that there is always a cyber security risk associated with online business applications, which can result in phishing, hacking, and cyberattacks. The authors discovered that while making payments online, consumers use firewalls that have been approved. Trading stocks using internet trading platforms promotes sustainable financing and green investing.

The report stressed how crucial financial literacy is 10720hilee utilizing these kinds of solutions. People think that having a solid understanding of finance affects their ability to use online trading tools to select a profitable portfolio. Additionally, they claim that before they are permitted to use the internet trading application to trade the best stocks, they must acquire more information. The use of such programs is influenced by information on buying and selling stocks via trading apps on the internet as well as the economic and technological sides of trading with these kinds of programs. The writers made the case that in order to lower the threat that comes with investing in monetary services and goods, they must possess analytical abilities and knowledge of those items.

It was also discovered that having technical knowledge has a significant impact on using online business apps. Using these applications is severely hampered by not understanding the technologically related features of any programs for trading stocks online and the algorithm utilized in securities trading.

The results of the poll indicate that consumers think using an internet application to trade stocks is a practical strategy. Interest in stock market investing rises as a result. You can save time by using an online business application. Using an internet trading form lessens the need for a financial counsellor or stockbroker. Using an internet business platform enables potential investors to become independent business owners. Utilizing internet business software is more economical and efficient. Your technical and financial knowledge of the stock market will grow if you use and adopt online trading software.

### Conclusion

India is among the world's fastest-growing economies, and its securities markets have seen notable changes since government liberalization measures were put into place. (S. Santhosh and K. G. Rajani,2019). Anyone may trade and invest with wallet apps. The dangers of involvement are decreased, traders receive helpful financial tools, and these intricate operations are mechanized. The study's goal is to analyse the variables related to consumers' use of these programs. Some significant inferences can be made in light of the study's analysis and findings. The descriptive analysis makes it abundantly evident that every aspect has a big impact on how users accept new features. The correlation analysis's findings indicate that there was a substantial association between the variables. The regression models' findings indicated that each of the six variables had a substantial impact'on the adoption behaviour of users. This indicates that the adoption of these online 'tock trading programs is heavily influenced by users' knowledge of online applications, advantages and investment possibilities, integrity, security, characteristics connected to risk, knowledge of finances, and technological perspective. The stock market encourages economic expansion and relieves financial limitations. Investment risks are decreased by stock market liquidity since it allows investors to modify their portfolios to avert any losses. The fact that people can now control makes the investment more alluring. The comprehension of the stock application and the behavioural aspects of its use is much enhanced by this study. The results aid in the

comprehension of user behaviour by the companies adopting these applications and by potential investors regarding the causes driving their uptake.

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