Investor's preference toward mobile stock trading applications

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In the age of digitization, mobile stock trading has gained popularity quickly. This study sought to determine which mobile trading app was the most popular, why users preferred certain trading apps, and what issues users ran into when trading on their mobile apps. To examine the primary data, this study included factor analysis and the Duncan test. The study consists of 85 convenient sampling of Bangalore city. The findings indicate a significant positive relationship between attitude, perceived behavioral control, trading app, more information, network speed and connectivity, superficial benefits, and intention to select mobile stock trading apps. It finds that faith adds enormous descriptive power to perceived behavioral control, mindset, and persuasion in explaining investors' adoption intention of mobile trading apps.

Keywords: mobile trading, stock trading app, digitalization

1. Introduction

When the Internet has impacted every industry that may be impacted by "stock markets," why has the biggest participant in the economy lagged far behind? Like many other industries, the Internet and mobile apps have established themselves in the stock markets. Buying and selling financial goods and services, such as shares and securities, is what is referred to as trading. Using an electronic communication channel facilitates a trading system where investors may submit orders and confirm transactions such as the Internet and mobile phones. Before submitting a trading order, Internet/mobile investors are free to take as much time as they need. Similar to the online/mobile app investor, he or she probably will not need to be concerned that their broker is conducting illicit trades. Due to the lack of a specific broker receiving a commission, the only person allowed to trace an account is the real investor. The likelihood of forming a positive attitude toward new trading channels increases with increased technology exposure. A rich user interface system offers a variety of controls that are user-friendly. The days are gone when the customers were made to pay higher

charges by small brokers as they were not aware of the market rates. Traditional brokers are now scrambling to scale up their online operations. The democratic nature of online and mobile app trading is one of the main reasons why regular investors like these platforms for their transactions. The rise of online/mobile app stock trading is hampered by significant obstacles such as hacking, computer illiteracy, inadequate infrastructure, and investors' aversion to risk. Therefore, it is anticipated that it would expand more in the near future with the rise of knowledgeable investors and backing from SEBI. In this light, this study aims to condense the reasons why investors prefer mobile stock trading apps while purchasing and selling shares online or on their smartphones. Through financial intermediaries, investors and traders can place trades and keep an eye on their accounts using mobile app stock trading platforms. Oftentimes, the stock trading stage will come bundled with supplementary features, such as real-time quotes, charting tools, news feeds, and even the finest research. As long as the financial transactions are properly protected, stock market professionals claim that trading via mobile apps is just as secure as trading in person. This study contributes to a better comprehension of the

TABLE 1 | Most popular trading apps (IPTA).

Name of the trading apps	N	Alpha subset = 0.05			
		01	02	03	04
Up-stock	04	0.22316			
Groww app	06	0.23593	0.23593		
Angle broking	07	0.24164	0.24164	0.24164	
Alice blue	09		0.25180	0.25180	0.25180
5 Paise	11		0.25496	0.25496	0.25496
M. Stock	13		0.26064	0.26064	0.26064
ICICI Direct Market	16			0.27014	0.27014
Zerodha	19				0.28007
Sig.		0.184	0.093	0.051	0.053

ANOVA value: 3.746, df: 05, Sig: 0.001. Means for groups in homogeneous subsets are displayed. Source: field study data, computed by researcher.

TABLE 2 | Reliability statistics on reasons for investors to adoption of mobile app stock trading.

Cronbach's alpha	No of items
0.739	11

Source: primary data, results are computed by the researcher.

investor's intention to purchase and sell shares using their practical mobile stock trading platforms.

2. Review of literature

Hu et al. (1)—Traditional mobile transactions' central hub is attackable and results in user privacy disclosure. A decentralized mobile trading platform is built using blockchain technology and mobile transactions to address this issue. Zhang and Teo (2)—Mobile trading technology has developed to suit investors' needs for access to the financial markets regardless of time and location as financial trading technology has evolved with wireless network infrastructure—the "two-edged sword" nature of this situation. Mobile trading platforms enhance investors' perceptions of trade in terms of perceived efficiency and perceived informativeness. Chong et al. (3)—In the age of digitization, mobile banking services have gained popularity quickly. The findings demonstrate a substantial correlation between intention toward mobile stock trading and attitude, perceived behavioral control, benefits, and benefits perceived from mobile stock trading. Kuang-Hsun (4)—Investors that use mobile trading platforms are liberated from site limitations, which may affect their trading habits and cognitive processes. The findings of the study indicate that the two sorts of investors have quite different ways of judging trading signals. Kim et al. (5)—Mobile devices are now peoples' primary source of information, making them crucial for e-commerce organizations to grasp how mobile trading devices affect their businesses. When it comes to anticipating future mobile trading system discontinuance, mobile attention has a strong statistical advantage over conventional trade-related indicators such as regency, frequency, and monetary value. Srivastava (6)—More customers now have access to financial services and products due to the Internet, which has also removed geographical restrictions. Investors used to rely entirely on their brokers, but, these days, they use the Internet to a greater extent to purchase and sell shares. E-trading enables people to access the market from anywhere at any time, saving time, energy, and money. Motilal Oswal Commodities Broker Pvt. Ltd (7)—In India, online trading is quite safe and secure. Following are some strategies for ensuring secure Internet trading: create a strong password, practice safe web browsing, and watch out for unverified and insecure connections. The infrastructure, framework, and system for Internet stock trading are all quite strong in India, and government regulation is very strict. Consequently, there is very less probability that a deal will be false. Iancu (8)—On the stock market, there are more and more online traders. The platform's visitor interaction is its most underutilized feature. To give investors the chance to conduct their own trades without a stockbroker's assistance, Internet trading platforms have been established. Online trading platforms provide customers with a variety of advantages, such as lower fees, real-time portfolio access, transfers of money or shares into and out of their accounts, and access to numerous markets.

3. Research methodology

The sample was studied on various demographic attributes such as Age, Sex, Occupation, Income, and Qualification. The respondents were asked to indicate their preference for mobile trading platforms. The study is based on 85 convenient respondents who do mobile trading and reside in Bangalore city. The target population of this study has chosen based on the convenience of the researcher and administration of questionnaires to inverters who trade in different online stock trading platforms. Both sources of data such as primary data and secondary data were used in the study. Primary data were collected through questionnaires and personal discussions with the investors. The secondary data are collected through the Internet, journals, books, and so on. Tables, factor analysis, and the Duncan test are used to analyze the data.

4. Objectives of the study

The objectives of this study were

1. To identify popular mobile stock apps among the respondents

TABLE 3 | Factor analysis on reasons for the investor to choose mobile stock trading platforms.

Reasons for the investor to choose mobile stock trading platforms in Bangalore	Initial eigenvalues			Extraction sums of squared loadings		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
Convenience	2.490	22.636	22.636	2.490	22.636	22.636
No middlemen	1.874	17.035	39.670	1.874	17.035	39.670
Faster transaction	1.531	13.916	53.586	1.531	13.916	53.586
Greater control	1.367	12.429	66.015	1.367	12.429	66.015
Better understanding	1.128	10.256	76.271	1.128	10.256	76.271
Easy to motivate	0.862	7.836	84.107			
More profitability	0.676	6.149	90.255			
Enhance effectiveness in trading	0.430	3.906	94.161			
Investment information	0.416	3.784	97.946			
Easy to operate	0.226	2.054	100.000			

Extraction method: principal component analysis.

2. To understand the reasons for investors to adoption of mobile app stock trading

3. To study the problems experienced by investors while doing mobile trading

5. Results and discussion

The most popular mobile trading apps are shown in **Table 1**. It has been found from the ANOVA that the computed ANOVA value is high and significant at a 1% level. Therefore, there are significant differences in the performance and perception of investors toward each trading app in terms of their preference and performance. However, ANOVA will not explain exactly where the difference exists. Accordingly, the Duncan multiple comparison technique has been used for this purpose.

The Duncan test confirms that there are four subsets. Zerodha and ICICI Direct Market are the most popular mobile trading App among the respondents. M. Stock, 5 Paise, and Alice Blue are moderately attracting mobile traders. Other apps such as Angle broking, Groww app, and Upstock are slightly lagging behind to attract investors. Therefore, all mobile trading apps are not the same in terms of preference and preference among current-day investors.

Cronbach's alpha has administered to assess the reliability or inner regularity of chosen variables (**Table 2**). The variables have a strong Cronbach's alpha value of 0.739. It is suggested that considered items have relatively high internal consistency and provide evidence that the scale in question is not dimensional so that additional analyses can be performed. Consequently, in the subsequent part, an attempt has been made to recognize the factors which contribute to reasons for the investor to choose mobile stock trading platforms in Bangalore. Ten factors have been considered for analyzing

TABLE 4 | KMO and Bartlett's test.

Kaiser–Meyer–Olkin measure of sampling adequacy		0.768
Bartlett's test of sphericity	Approx. chi-square	306.571
	df	78
	Sig.	0.000

Source: primary data, results are computed by the researcher.

reasons for the investor to choose mobile stock trading platforms in Bangalore.

5.1. Reasons for investors to adoption of mobile app stock trading

The five-point Likert scale has given to respondents to give their opinion on the scale of 1–5. The scores given by the respondents are summarized and presented in **Table 3**.

To decrease a great number of variables into fewer statistics of factors, the principal component analysis method has been used; this method retains those factors with the largest variance (eigenvalue) that are greater than 1. In this study, the total variance test has suggested retaining 5 components out of 10 variables, i.e., 5 variables are having an eigenvalue greater than 1. Therefore, the following components are the main reasons to choose mobile stock trading platforms in Bangalore: convenience (2.490), no middlemen (1.874), faster transaction (1.53), greater control (1.3667), and better understanding (1.26).

The Kaiser–Meyer–Olkin (KMO) and Bartlett's test was conducted to identify the adequacy of samples for problems experienced by the investors while doing mobile trading. The factor analysis has found that the KMO value is 0.768.

TABLE 5 | Factor analysis of problems experienced by the investors.

Problems experienced by the investors	Initial eigenvalues			Extraction sums of squared loadings		
	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1. Incorrect choice of the markets	5.616	43.197	43.197	5.616	43.197	43.197
2. Lack of proper tools to trade	1.614	12.414	55.610	1.614	12.414	55.610
3. Low speed of information	1.255	9.655	65.266	1.255	9.655	65.266
4. No personal relationships with brokers.	0.857	6.589	71.855			
5. Low computer illiteracy	0.681	5.237	77.092			
6. Risk-averse attitude of investors	0.660	5.080	82.172			
7. Occurrence of fraud and hacker	0.561	4.316	86.488			
8. Unable to get compensation	0.440	3.386	89.875			
9. Occurrence of fraud	0.413	3.177	93.052			
10. Risk of new announcements	0.339	2.609	95.660			
11. Security issues	0.236	1.817	97.477			
12. Wait and watch attitude	0.200	1.535	99.012			
13. Risk of system failure	0.128	0.988	100.000			

Extraction method: principal component analysis.

5.2. Problems experienced by investors while doing mobile trading

The five-point Likert scale was given to respondents to give their opinion on a scale of 1–5. The scores given by the respondents are summarized and presented in the following descriptive analysis.

Table 5 deals with factor analysis. To decrease a great figure variable into fewer numbers of factors, the principal component analysis method is used. This method retains those factors with the largest variance (eigenvalue) that is greater than 1. In this study, the total variance test has suggested to retain 3 components out of 13 variables, i.e., 3 variables are having the eigenvalue greater than 1. Therefore, the following components are the main problems of online stock trading platforms: incorrect choice of the markets (5.616), lack of proper tools to trade (1.614), and low speed of information (1.255).

6. Conclusion

The investor can gain access to market news, financial calendars, and issuer press releases. A solid online trading platform also gives real-time intraday quotes, trading history, and technical analysis, providing the investor with a better understanding of the market's supply and demand. All of this information gives the investor a positive impression of the market and motivates him to trade. Electronic services have enabled the use of the Internet platform in stock trading, allowing individuals from all over the world to participate in trading operations. Due to the Internet's existence and development, transactions can now be completed without or with less human participation. Even with minor difficulties, the overall performance of mobile trading apps is an acceptable research topic.

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