

“Investors’ Behavior towards Stock Trading Apps in National Capital Region Delhi”

Mr. Ramesh Kumar,

Associate Professor, Department of Commerce, PGDAV College Eve, University of Delhi, Nehru Nagar, New Delhi, Delhi. India
Email – rameshdav2@gmail.com

Abstract: This study delves into the transformative impact of stock trading applications on investor behavior within the National Capital Region Delhi. As the financial landscape evolves, these applications democratize stock market investment, making it accessible to a broader audience. Traditionally, investing required substantial expertise and direct interactions with stockbrokers. However, technology-driven applications have significantly altered these dynamic, enabling investors to engage with the market through their mobile devices. This research aims to explore various factors influencing the adoption of these applications, including awareness, benefits, reliability, safety, financial literacy, technical aspects, and dependency. Through a quantitative methodology involving a survey of 424 participants, the study assesses the correlation between these factors and user adoption behavior, providing insights into the future of investing in the digital era.

Keywords: Stock Trading Applications, Investor Behavior, National Capital Region, Financial Literacy, Mobile Commerce, Online Investing, Technology Adoption, Market Access.

INTRODUCTION

For those looking to invest, the stock market has become a very profitable platform. Investors' attention has been drawn to the stock market due of its gradual growth. Amidst the dynamic nature of the financial world, the stock market remains an appealing and effective venue for anyone seeking to amass riches. Buying and selling stocks used to need a great deal of expertise, correspondence with stockbrokers, and general understanding of the market. Nonetheless, the advent of technology-driven web apps has transformed the investing landscape, making it more accessible to the general public. Investors and traders gather on the stock market to trade publicly traded company equity shares. Offline and online investing are two of many ways to get into the stock market. When combined, the web and the internet provide a foundation for online shopping. Online shopping, or e-commerce, allows consumers to browse for products and services and make purchases without leaving the comfort of their own homes. Furthermore, mobile commerce (or M-commerce) is a subset of electronic commerce that enables consumers to purchase goods and services online using their mobile

devices. In order to facilitate the trading of stocks over a number of online stock exchanges, an infrastructure known as "online trading" has emerged.

Investors may run stock trading apps on the mobile platform, allowing for speedy stock search and trading. Several mobile devices, including smartphones and tablets, are able to connect to the internet using the mobile platform. Traditional desktop or laptop computers are losing ground to more portable alternatives like smartphones and tablets as the principal way of accessing the internet on a global scale. Numerous stock market-related mobile apps are available on the mobile platform. Apps for mobile trading are offered by leading organizations as Upstox, ICICIdirect Market, Angle Broker, Zerodha Kite, Motilal Oswal, and 5paisa, allowing clients to trade in the stock market. An online platform that facilitates buying and selling on the trading platform as well as updating and managing investments is known as a stock market application. Trading stocks using a variety of mobile apps is the mainstay of online stock exchanges. An online exchange app is a kind of mobile software that allows users to see stock and asset trades that take place on the internet.

With the most recent and cutting-edge advancements in internet infrastructure, mobile technology has made it possible for wireless devices like smartphones, tablets, and personal digital assistants to have on-demand access to social media and information via mobile web browsers. The capital market is no longer immune to on-demand access; a recent study indicated that traders and investors rely increasingly on mobile internet for research, communication, and trading. Among Vanguard's clients, one-third frequently uses their mobile devices to access their trading accounts. Stock market participants were able to buy and sell financial products in real-time thanks to mobile internet technology that allowed them to access data wirelessly. This efficient method of getting stock market data via mobile internet could reduce the expenses of searching, trading, and disseminating information. In 2021, the Indian stock market hit the \$3 trillion threshold. The advent of new technologies is the cause for this growth in investor participation, according to financial industry analysts. The Indian stock market has been greatly impacted by the rise of online mobile application trading and investing. Investment in the stock market using an online trading program is the focus of this research.

Problem statement

Investment in the stock market is now more accessible and easy than ever before thanks to internet apps made possible by the fast development of technology, which has transformed the financial landscape. Even if these platforms are becoming more popular, it is still a significant barrier for companies in the financial industry to understand customer adoption behavior. Consumers' decision-making processes and the obstacles they face while participating in the stock market using online apps need to be better understood. Finding out what drives people to utilize stock market investing apps on the web was the driving force behind our research.

Finally, this research piece aims to provide a comprehensive evaluation of customer adoption behavior for

online stock market investing apps. By studying the factors that influence users' choices, we want to create an investing environment that is more informed and welcoming to everyone, which will boost opportunities for financial empowerment and development in the digital age.

LITERATURE REVIEW

Awareness

Raising investor awareness is the principal duty of stock market participants. When investors are well-informed about the financial markets, they are able to make risk-free investing decisions. Due to concepts about financing patterns, the writers brought attention to the requirement of buyer awareness. Age, gender, income, education, and socio-financial characteristics are among the most important considerations for investors (Umamaheswari and Kumar 2013). Based on their analysis, the authors have determined that three limitations are crucial. Investing in the stock market, being knowledgeable about the stock market, and having access to stock market information are all things that investors must deal with. Massive losses could occur if investors lack proper knowledge about the stock market dynamics affecting a particular industry. To be successful in the stock market, investors need to know enough about the elements that have been discovered to help them make the proper decisions (Prabhu and Gajendran 2021). We may derive the following hypothesis from the preceding arguments.

HYPOTHESIS DEVELOPMENT

H1. The adoption behaviour is influenced by users' awareness of such applications.

Benefits and choice of investment

Putting money into the stock market, says the author, is a gamble with uncertain returns. People invest their money in many options, which offers several advantages and lowers the risk. Because of this, there are three basic goals that everyone has while investing in the stock market: reducing risk, increasing wealth, and maintaining liquidity (Obamuyi, 2013). According to the author, the most important part of any investment plan or business deal is finding the correct stock. Anyone looking to participate in the stock market transactions must choose the appropriate stock. Whether an investor is interested in investments with a long or short time horizon is another temporal aspect that influences their investment decision (Ashraf and Baig 2015). According to the authors, certain types of investors have specific preferences. Foreign portfolio investors tend to own large stocks in large-cap firms and companies in the service industry. Domestic institutional investors, on the other hand, are more likely to own shares in the paper industry. Lastly, retail investors, on the other hand, tend to own shares in textile and chemical companies. Companies with a foreign market registration are preferred by foreign portfolio investors. Domestic investors, especially retail investors, have a preference for

small-cap companies, and in addition to diversifying their investments across industries, the processes of these businesses need local expertise. To entice investors, the government must issue new rules and make necessary adjustments (Chhimwal, Bapat and Gaurav, 2021). Investors' actions in embracing internet trading are heavily impacted by demographic considerations, among all others. Factors such as housing status, income level, level of trade experience, and profession impact the uptake of online trading. Factors such as age, gender, educational achievement, trade type, and trading frequency do not have a major impact on this choice. Perceived benefits and hazards do not play a significant role in the uptake of online trading (Singh and Malhotra, 2016).

Whether or not individuals choose to trade online could be greatly affected by the benefits of online trading programs. The many advantages may influence the acceptance of online trading in various ways, such as accessibility, simplicity, affordability, reliability, security, mobile adaptability, and compatibility. All things considered, the many benefits offered by different online trading programs play a significant role in shaping customers' views and decisions. More features or fixes to security vulnerabilities may be required to enhance the growth of a particular platform, but a more attractive and complete set of advantages might increase adoption rates.

Researchers found that people's intentions to use mobile banking were heavily influenced by factors such as social influence, perceived financial cost, anticipated performance, and perceived legitimacy (Yu, 2012). Users' intents to trade online are influenced by the ease of use and the speed with which financial markets may be accessed via online platforms. Internet trading systems must take perceived trust, utility, and convenience of use into account, but (Roca, García and Veg 2009). Several factors, including outlook, perceived behavioral control, advantages, and desire to trade stocks via mobile device, are positively correlated with one another (Chong, Ong, and Tan, 1969). For individual investors, the allure of lower transaction costs is a major factor in considering moving their business online rather than to a more conventional brokerage. We may derive the following hypothesis from the preceding arguments.

H2. The users' adoption behaviour is influenced by the benefits and choice of investment of such applications.

Reliability, safety, and risk-related factors

Researchers found that people's intentions to use mobile banking were heavily influenced by factors such as social influence, perceived financial cost, anticipated performance, and perceived legitimacy (Yu, 2012). Users' intents to trade online are influenced by the ease of use and the speed with which financial markets may be accessed via online platforms. Internet trading systems must take perceived trust, utility, and convenience of use into account, but (Roca, García and Veg 2009). Several factors, including outlook, perceived behavioral control, advantages, and desire to trade stocks via mobile device, are positively correlated with one another (Chong, Ong, and Tan, 1969). For individual investors, the allure of lower transaction costs is a major factor

in considering moving their business online rather than to a more conventional brokerage. We may derive the following hypothesis from the preceding arguments.

H3. Reliability, Safety, and risk-related factors significantly impact the users' adoption behaviour.

Financial literacy

Information processing and decision-making studies place a premium on product knowledge (Brucks, 1985; Raju and Lonial 1995). A product is anything that has the potential to meet human needs and desires. Having a fundamental understanding of financial investment principles like interest rate, inflation, and risk diversification calculations is what's known as financial literacy . Knowledge about money matters affects how customers invest (Caroline at.el.2015). It has been determined that clients must first attend seminars or other financial education programs put on by various groups in order to acquire financial literacy. Intention and knowledge are favorably correlated with objective financial literacy (Mishra, 2018). An individual's capacity to make decisions is improved and their reliance on information is diminished when they have product knowledge. Choosing to invest in the stock market is more likely when one has a high level of self-assessed financial literacy.

There is an important correlation between financial literacy and the use of online trading platforms in the modern financial landscape. While being financially literate helps encourage more people to trade online, there is no guarantee that you will be successful at it. There are still risks involved with internet trading, so even those who are good with money should proceed with caution and know what they can afford to lose and what their investing goals are. Improved financial decision-making, especially when it comes to online trading, is a common goal of governments, academic institutions, and financial service providers that strive to raise financial literacy via a variety of programs and resources.

People with a good grasp of personal finance are more likely to make use of online trading platforms, since this allows them to more accurately assess the pros and cons of various investment options. Better trading outcomes are another benefit of these individuals' propensity to diversify their holdings and make educated investing decisions. Having a good grasp of money matters is essential for making informed financial decisions. People are scared to trade online because they don't understand financial jargon, market concepts, or investment strategies. In addition, being able to create and stick to a budget, put money aside regularly, and eliminate debt are all examples of what it means to have financial literacy. Researcher may derive the following hypothesis from the preceding arguments.

H4. Financial literacy impacts the users' adoption behaviour.

Knowledge of technical aspects

Investors were able to conduct investing activity in a more agile, transparent, and rapid manner thanks to mobile technology platforms. The stock market has changed because of the new technology. New innovations

in the investing sector have made it possible for traders and investors to manage their money portfolios and perform business transactions instantly, regardless of their location (Chong, Ong, and Tan 2021). Anyone, at any time, from any location, may use online trading software to generate money in the financial market. Concerns about trust, security, and perceived risk are among the many technology concerns of financial market participants who invest online (Xu and Utkus 2019). When internet services for stock trading and investing were invented and became widely available, they revolutionized the financial sector (Ancuta, 2015) Stock price tracking, corporate information analysis, and stock performance tracking are just a few of the many things that internet investors do on the go (Nourallah,2022). Consistent with a behavioral finance perspective, our research found that investors need a lot of information (Stålnacke, 2019). They get a better understanding of financial services and the technology behind mobile applications via public information (Rezaei at.el. 2016). When it comes to financial planning, the authors discovered that publicly available information is crucial, including credit ratings, interest rates, and other characteristics on investments (Bapat,2020). Initial confidence will be increased when financial service providers give accurate information (Kaabachi, Mrad and Leary, 2019). As a consequence of technology innovation, a new way of providing financial services internationally has evolved. The use of electronic money, however, is not without its difficulties and hazards. The development of worldwide technology has an effect on e-finance in many ways, including security, income and cost aspects, and technical architecture (Narayanasamy, Rasiah and Tan, 2011). We may derive the following hypothesis from the preceding arguments.

H5. The knowledge of technical aspects influences the users' adoption behaviour.

Dependency

Factors such as age, level of expertise, and risk perception influence customers' choices to buy in stocks (Koestner, at.el.2017; Johri and Kumar, 2023). Prior research has shown that in order for retail investors and human financial advisers to develop a rapport, crucial information is required (Kostovetsky, 2016). When trying to gauge the reliability of financial tech solutions, stock market investors can only depend on publicly available data (McKnight, 1998). When it comes to money, people now look on social media as a trustworthy source of information (Florendo, and Estelami 2019). Customers are more likely to trust private information than public or leaked information (Bommer, Rana and Milevoj 2022; Chan, at.el.2022), and social impacts disprove the idea that investors' success is dependent on feedback from others. We may derive the following hypothesis from the preceding arguments.

H6. The users' adoption behavior is influenced by the user's investment dependency.

Adoption behavior

A number of variables influence investor behavior when it comes to the adoption of online apps for e-trading and other investing choices. Perceived returns, effort expectations, and performance expectations are three

major aspects that impact investors' behavior (Nair, at.el. 2023). As important predictors of market adoption behavior, investors' perceptions of return and risk were evaluated (Nouri, Motamedi and Soltani, 2017). Investors' adoption intention is favorably affected by enabling circumstances, regardless of the kind of online engagement. Investors' adoption behavior is influenced by enabling circumstances and technical advancement, according to previous study (Chao, 2019). Investors use online platforms to earn and get more income often, and stock market investors are influenced to participate in the financial market by more substantial revenue (Rahman, Rahman and Talapatra, 2020). Intentional behavior and enabling circumstances impact investors' use of mobile applications for online stock transactions, and it was discovered that future investors should take these variables into account while trading stocks using mobile applications (Nouri, Motamedi and Soltani, 2017).

The six factors that the research used to analyze the effect on users' adoption behavior are shown in Table 1, which was derived from the aforementioned literature review.

Table 1: Constructs of the study and its sources.

S. No.	Construct	Sources
1	Awareness	Uma Maheswari and Kumar 2013; Prabhu and Gajendran 2021.
2	Benefits and choice of investment	Ashraf and Baig 2015; Chhimwal et al. 2021.
3	Reliability, Safety, and risk-related factors	Fama et al. 1969; Ashraf and Baig 2015; Lackmann et al. 2021; Trang and Tho 2017; Pinasti et al. 2022; Al-Khalaf and Choe 2020.
4	Financial literacy	Lusardi, and Mitchell 2016; Caroline et al. 2015; Mishra 2018.
5	Technical aspect	Ancuta 2015; Bapat 2020; Chong et al. 2021; Nourallah 2022
6	Dependency	Koestner et al. 2017; Stålnacke 2019, Florendo and Estelami 2019 Bommer et al. 2022; Chan et al. 2022.
7	Adoption behaviour	Nouri et al. 2017; Chao 2019; Palau-Saumell et al. 2019; Rahman et al. 2020

METHODOLOGY

- **Objectives of research**

1. See how well-informed individuals are about share trading programs available online.
2. Aiming to learn how and why individuals use online share trading apps to put their money into the stock market.
3. In order to assess the trustworthiness, security, and risk associated with stock market investment via online share trading platforms.
4. This study aims to analyze the relationship between technical expertise and financial literacy as it pertains to online share trading apps.
5. In order to learn how people rely on and use online share trading apps to trade in the stock market.

The research model

Awareness, advantages and investment decision, dependability, technical aspect, financial literacy, and aspects relating to safety and risk were the six independent variables discovered in the research. Users' adoption behavior was specified as a dependent variable in order to investigate the effects of these factors. The study's goals and research approach were developed based on these variables. Figure 1 shows the study's suggested conceptual model:

Research method

Data collection and sampling

In the National Capital Region, this study employs a quantitative approach to investigate investor behavior in relation to stock market applications. A standardized questionnaire based on a 5-point Likert scale was used to collect data in an online survey. The following seven categories were covered by the 29 statement-based questions that made up the survey: familiarity with online trading applications, reliability, trustworthiness, safety and risk considerations, financial literacy, technical elements, dependence, and adoption behavior. In addition to a pilot test with 50 people to fine-tune the questionnaire, the sample technique used was convenient sampling, a kind of non-probability sampling. In the end, the research benefited from the insightful comments provided by 424 people in the National Capital Region Delhi. After receiving assurances that their data would remain secret, all respondents were asked to provide their informed permission. Since the study's overarching goal was to examine quantitative user behavior towards stock market apps in the National Capital Region Delhi, it did not need ethical clearance.

Data analysis

The statistical package SPSS was used to assess the information collected during this inquiry. The obtained data was examined using descriptive statistics, reliability tests, correlations, and regression analysis.

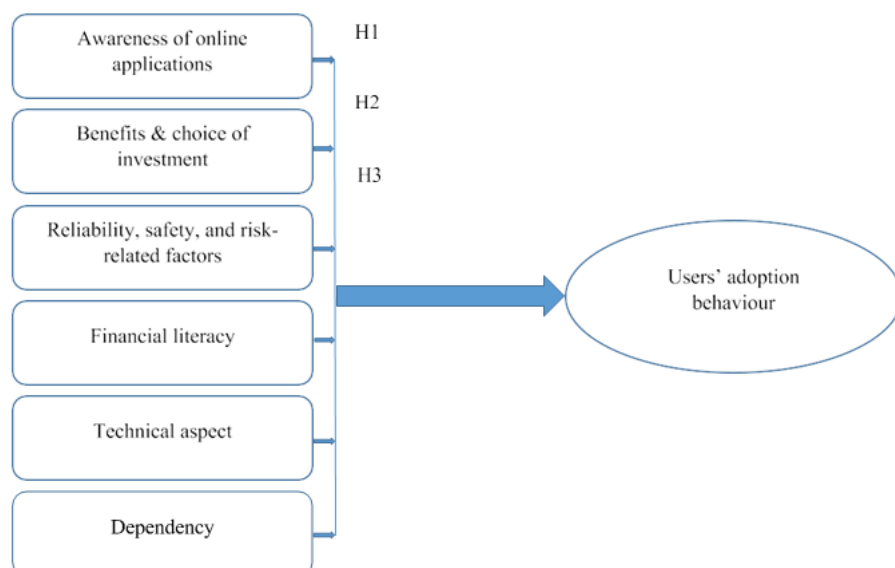


Fig. 1. Proposed conceptual framework.

Demographic profile

The respondent demographics are shown in Table 2. The gender breakdown of the 424 responders was as follows: 258 men (60.85%) and 166 women (39.15%). There were 174 respondents (17.45%) under the age of 20, 166 (39.15%) between the ages of 21 and 30, 75 (17.69%) between the ages of 31 and 40, 45 (10.61%) between the ages of 41 and 50, 44 (10.38%) between the ages of 51 and 60, and 20 (4.72%) beyond the age of 60. Fifty-eight people (13.68%) worked for the government, 185 (43.63%) for private companies, 89 were self-employed, and 92 (21.70%) were in the student body. A monthly wage ranging from 20,000 to 60,000 rupees was reported by 255 respondents. There were 278 stock market investors and 146 non-investors among the respondents. This is a great signal for analysis since it shows that most people would rather use an online trading software to invest in the stock market, regardless of whether they trade or not.

Reliability test

To assess the internal consistency of the constructs, reliability analysis (Cronbach's alpha) was carried out. The reliability of each concept was evaluated using SPSS. Table 4 provides a concise summary of the idea's reliability and its interpretations. Every one of the variables has a Cronbach's Alpha value higher than 0.70. The data was very trustworthy and consistent with itself, as shown by Cronbach's alpha values ranging from 0.732 to 0.874. The results show that the scale was reliable and provided enough information for the study.

Correlation analysis

The purpose of doing a correlation analysis is to determine the strength and direction of the relationship between two variables.

The formula was used to compute the correlation.

$$r = (\Sigma [(X_i - \bar{X})(Y_i - \bar{Y})]) / [\sqrt{(\Sigma (X_i - \bar{X})^2)} \sqrt{(\Sigma (Y_i - \bar{Y})^2)}] \text{ where:}$$

X_i and Y_i = Individual data points for variables X and Y, respectively.

Table 2: Demographic profile of the respondents

Variable	Category	Frequency	Percentage
Age	Less than 20	74	17.45
	21–30	166	39.15
	31–40	75	17.69
	41–50	45	10.61
	50–60	44	10.38
	Above 60	20	4.72
Gender	Male	258	60.85
	Female	166	39.15
Profession	Government Employee	58	13.68
	Private Employee	185	43.63
	Business	89	20.99
	Student	92	21.70
Monthly Income	Rs. 20,000–40,000	190	44.81
	Rs. 40,000–60,000	65	15.33
	Rs. 60,000–80,000	46	10.85
	Rs. 80,000–100,000	53	12.50
	Above Rs. 100,000	70	16.51
Invest in Stock Market	Yes	278	65.57
	No	146	34.43
Preferred Mode of Investment (for investors)	Financial Advisor	94	22.17
	Online Applications (Invest on your own)	330	77.83

Preferred Mode of Investment (for non-investors)	Financial Advisor	84	19.81
	Online Applications (Invest on your own)	340	80.19

Table 3: Descriptive statistics of the variables

	N	Minimum	Maximum	Mean	Std. Deviation
Awareness	424	2.5	5	3.774	0.620
Benefits and choice of investment	424	2.33	5	3.613	0.630
Reliability, Safety, and risk-related factors	424	2.6	5	3.615	0.529
Financial literacy	424	1.75	5	3.489	0.753
Technical aspect	424	2	5	3.268	0.799
Dependency	424	3	5	3.764	0.493

Table 4: Reliability analysis of the variables

Constructs	N	Number Of Items	Cronbach's Alpha	Internal Consistency
Awareness	424	4	0.874	Excellent
Benefits and choice of investment	424	3	0.814	Excellent
Reliability, Safety, and risk-related factors	424	5	0.732	Excellent
Financial literacy	424	4	0.819	Excellent
Technical aspect	424	3	0.829	Excellent
Dependency	424	4	0.864	Excellent
Users' adoption behaviour	424	6	0.834	Excellent

Table 5: Correlation analysis of the variables

	AW	BCI	RSRF	FL	TA	DEP	UAB	p value
AW	1	0.542	0.000	1	0.000			1
BCI	0.459	1	0.000	0.530	1			0.000
RSRF	0.733	0.302	1	0.419	0.000			0.000
FL	0.729	0.384	0.483	1	0.786			0.000
TA	0.399	0.320	0.490	0.353	0.342	1		0.000
DEP	0.293	0.524	0.587	0.150	0.284	0.802	1	0.000

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

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

Table 5 displays the association between the dependent and independent variables. According to the results of the correlation analysis, awareness of online applications $r(424) = 0.29, p < .05$, benefits & choice of investment $r(424) = 0.52, p < .05$, reliability, safety, and risk-related factors $r(424) = 0.58, p < .05$, financial literacy $r(424) = 0.14, p < .05$, technical aspect $r(424) = 0.28, p < .05$, dependency $r(424) = 0.80, p < .05$, and users' adoption behaviour were found to be significantly correlated.

Bivariate Regression Analysis

This study includes a dependent variable (Users' adoption behaviour) and six independent variables (awareness of online applications, benefits & choice of investment, reliability, safety, risk-related factors, financial literacy, technical aspect, and dependency). Because of the likelihood of multicollinearity and the need for individual regression coefficient analysis, bivariate regression analysis was performed using the following formula:

Regression Model Specification:

$$UAB = \beta_0 + \beta_1 AW + \beta_2 BCI + \beta_3 RSRF + \beta_4 FL + \beta_5 TA + \beta_6 DEP + \epsilon$$

where:

UAB = Users' adoption behaviour

β_1 AW = Awareness of Online Applications

β_2 BCI = Benefits & Choice of Investment

β_3 RSRF = Reliability, safety, and risk-related factors

β_4 FL = Financial literacy

β_5 TA = Technical aspect

β_6 DEP = Dependency

β_0 : Intercept (constant term).

β_1 : (i = 1, 2, 3, 4, 5) Slope (coefficient of the independent variables).

ϵ : Error term (residuals).

Table 6 shows that user adoption behavior is significantly predicted by the first independent variable, which is knowledge of online apps, based on the standard deviation-model summary estimate. The adoption behavior of users has a very variable value. Given the values of F, p, and R², it can be concluded that the regression model is statistically significant. There is a significant relationship between users' knowledge of online applications and their adoption behavior, even at the 5% p-value level.

Clients' reception conduct is fundamentally anticipated continuously autonomous variable, benefits and decision of venture, as displayed in the standard deviation-model synopsis gauge in Table 7. The value of users' adoption behavior is highly variable. Given the upsides of F, p, and R², it very well may be reasoned that the relapse model is genuinely critical. However, there is statistical significance between the independent variables and the modified R-squared value even when the model's R square is low. Albeit this shows that the autonomous elements are connected with the reliant variable, it doesn't imply that the free factors make sense of by far most of the change in the reliant variable. At the 5% p-value threshold, benefits and investment choice have a significant impact on user adoption behavior.

The standard deviation-model summary estimate in Table 8 indicates that consumers' adoption behavior is significantly influenced by the third independent variable, which is related to safety, dependability, and risk. The value of users' adoption behaviors varies significantly. Given the upsides of F, p, and R², it very well may be reasoned that the relapse model is genuinely critical. Even though the model's R square and adjusted R square values are low, independent variables are still statistically significant. Albeit this shows that the autonomous elements are connected with the reliant variable, it doesn't imply that the free factors make sense of by far most of the change in the reliant variable. There is a huge connection between client reception conduct and boundaries relating to constancy, wellbeing, and hazard at the 5% p-esteem limit.

Table 9 shows the standard deviation-model synopsis gauge for the free factors. Financial literacy, the fourth variable, significantly predicts users' adoption behavior. The value of users' adoption behavior is highly variable. Given the upsides of F, p, and R², it very well may be reasoned that the relapse model is genuinely critical. Even though the model's R square and adjusted R square values are low, independent variables are still statistically significant. Albeit this shows that the autonomous elements are connected with the reliant

variable, it doesn't imply that the free factors make sense of by far most of the change in the reliant variable. The financial literacy of consumers has a significant impact on their adoption behavior at the p-value cutoff of 5%. Table 10 shows that clients' reception conduct is fundamentally anticipated by the specialized angle, the fourth free factor, in view of the standard deviation-model rundown gauge. The value of users' adoption behavior is highly variable. The regression model's F-, p-, and R²-values demonstrate statistical significance. In any case, autonomous factors have factual importance in the model, regardless of whether the R square and changed R square qualities are very low. Albeit this shows that the autonomous elements are connected with the reliant variable, it doesn't imply that the free factors make sense of by far most of the change in the reliant variable. Specialized factors altogether affect client reception conduct at the 5% p-esteem edge. Information from Table 11's standard deviation-model outline gauge shows that reliance, the 6th free factor, essentially impacts clients' reception conduct. The value of users' adoption behavior is highly variable. Given the upsides of F, p, and R², it very well may be reasoned that the relapse model is genuinely critical. The impact of dependence on user adoption behavior is significant at a p-value of 5%.

Testing of hypotheses

Regression analysis revealed statistically significant interaction effects among the dependent variable, technical aspect, financial literacy, and the other relevant variables ($R^2 = 0.897$, $F(6, 359) = 287.099$, $p = .000$). By breaking down the predictors into their component parts, we were able to establish the nature of the link between the independent and dependent variables. $R^2 = 0.085$, $F(1, 423) = 39.601$, $p = .000$, indicating that "awareness of online applications" was a significant predictor in the model, supporting the acceptance of H1. In addition, "benefits & choice of investment" ($R^2 0.274$, $F(1, 424) 159.321$, $p .000$) was found to be a significant predictor in the model; thus, H2 was accepted, "reliability, safety, and risk-related factor" ($R^2 0.345$, $F(1, 424) 222.366$, $p .000$) was found to be a significant predictor in the model; thus, H3 was accepted, "financial literacy" ($R^2 0.022$, $F(1, 423) 9.700$, $p .001$) was found to be a significant predictor in the model; thus, H4 was accepted, "technical aspect" ($R^2 0.080$, $F(1, 424) 37.049$, $p .000$) was found to be a significant predictor in the model; thus, H5 was accepted, and "dependency" ($R^2 0.080$, $F(1, 423) 37.049$, $p .000$) was found to be a significant predictor in the model; thus, H6 was accepted. Table 12 provides a summary of the hypothesis testing:

Table 13 shows the results of the analysis of variance (ANOVA) for all six regression predictor models, and Table 14 shows the regression model coefficients. Using an ANOVA model, we assessed the models' interrelationships across all variables. An ANOVA may be useful for

Table 6: Estimation of the standard deviation-Model Summary (Independent Variable-awareness of online applications), Theoretical Form of the Model, Users' adoption behaviour = $a + b$ Awareness of Online Applications, Regression Model Summary^{b1}.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F Change	Significance F
1	0.292	0.857	0.836	0.437	39.601	.000

a. Predictors: (Constant), Awareness of online applications.

b Dependent Variable: Users' adoption behaviour.

Table 7: Estimation of the standard deviation- Model Summary (Independent Variable-benefits & choice of investment), Theoretical Form of the Model, Users' adoption behaviour = $a + b$ Benefits & Choice of Investment Regression Model Summary^{b2}.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F Change	Significance F
2	0.523	0.274	0.272	0.389	159.321	.000

a. Predictors: (Constant), Benefits & choice of investment.

b Dependent Variable: Users' adoption behaviour.

Table 8: Estimation of the standard deviation- Model Summary (Independent Variable-reliability, safety, and risk-related factors) Theoretical Form of the Model, Users' adoption behaviour = $a + b$ Reliability, safety, and risk-related factors, Regression Model Summary ^{b3}.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F Change	Significance F
3	0.587	0.345	0.343	0.370	222.366	.000

a. Predictors: (Constant), Reliability, safety, and risk-related factors.

b Dependent Variable: Users' adoption behaviour.

Table 9: Estimation of the standard deviation-Model Summary (Independent Variable-financial literacy) Theoretical Form of the Model, Users' adoption behaviour = a + b Financial literacy Regression Model Summaryb4.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F Change	Significance F
4	0.149	0.022	0.020	0.452	9.700	.001

a. Predictors: (Constant), Financial literacy.

b Dependent Variable: Users' adoption behaviour.

Table 10: Estimation of the standard deviation- Model Summary (Independent Variable-technical aspect) Theoretical Form of the Model, Users' adoption behaviour = a + b Technical aspect, Regression Model Summaryb5.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F Change	Significance F
5	0.284	0.080	0.078	0.438	37.049	.000

a. Predictors: (Constant), Technical aspect.

b Dependent Variable: Users' adoption behaviour.

Table 11: Estimation of the standard deviation- Model Summary (Independent Variable-dependency) Theoretical Form of the Model, Users' adoption behaviour = a + b Dependency, Regression Model Summaryb 6.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	F Change	Significance F
6	0.801	0.642	0.641	0.273	758.831	.000

Predictors: (Constant), Dependency.

Dependent Variable: Users' adoption behaviour.

checking for a statistically significant difference between the means of the independent variables. Finding the related independent variable with our dependent variable requires first realizing that the means of all the independent variables are different.

The values of the regression coefficients for all six variables are shown in Table 13. Based on the data, the user's adoption behavior is most affected by the sixth predictor ($\beta = .742$, $t = 27.546$, $p < .05$), then by the third predictor ($\beta = 0.506$, $t = 14.911$, $p < .05$), the second predictor ($\beta = 0.379$, $t = 12.622$, $p < .05$), the first predictor ($\beta = 0.215$, $t = 6.292$, $p < .05$), the fifth predictor ($\beta = 0.162$, $t = 6.086$, $p < .05$), and finally, by the fourth predictor ($\beta = 0.090$, $t = 3.114$, $p < .05$).

RESULTS AND DISCUSSIONS

Online stock trading apps are the focus of this research, which seeks to understand the elements that affect them, including: knowledge, dependability, safety, benefits and investment decision, technical aspects, financial literacy, risk-related factors, and adoption behavior. The results show that these factors have a major effect on how people utilize stock trading apps available online. All six independent variables have a substantial impact on the adoption of such apps, according to descriptive statistics research.

Near the fourth Likert scale point, we find the average value of all the variables. Therefore, it seems like all the variables are set to "agree."

Table 12: Results of hypotheses testing.

Result	Hypothesis	Accept/Reject
Accepted	H1: The adoption behaviour is influenced by users' awareness of such applications.	Significant (p-value < 0.05)
Accepted	H2: The users' adoption behaviour is influenced by the benefits and choice of investment of such applications.	Significant (p-value < 0.05)
Accepted	H3: Reliability, Safety, and risk-related factors significantly impact the users' adoption behaviour.	Significant (p-value < 0.05)
Accepted	H4: Financial literacy impacts the users' adoption behaviour.	Significant (p-value < 0.05)
Accepted	H5: The knowledge of technical aspects influences the users' adoption behaviour.	Significant (p-value < 0.05)
Accepted	H6: The users' adoption behaviour is influenced by the user's investment dependency.	Significant (p-value < 0.05)

Table 13: Coefficients regression models 1, 2, 3, 4, 5, and 6.

Model	Coefficients	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
1	(Constant)	0.668	0.089	7.513	.000
	Awareness of online applications	-0.111	0.028	0.215	6.292
	Benefits & choice of investment	0.215	0.020	0.379	12.622
	Reliability, Safety, and risk-related factors	0.159	0.025	0.506	14.911
	Financial literacy	-0.186	0.023	0.090	3.114
	Technical aspect	0.105	0.021	0.162	6.086
	Dependency	0.668	0.023	0.742	27.546
2	(Constant)	-0.256	0.057	-4.480	.000
	Awareness of online applications	0.049	0.028	0.095	1.751
	Benefits & choice of investment	0.136	0.020	0.240	6.862
	Reliability, Safety, and risk-related factors	-0.217	0.025	-0.688	-8.541
	Financial literacy	0.183	0.023	0.089	7.847
	Technical aspect	-0.115	0.021	-0.177	-5.448
	Dependency	-0.256	0.023	-0.284	-11.083

A Users' adoption behaviour

The most significant use of online stock trading software is indicated by a standard deviation of 0.799. Then again, with a standard deviation of simply 0.493%, reliance is the most predictable. The information had exceptionally elevated degrees of unwavering quality and inside consistency, as shown by Cronbach's alpha.

A vigorous and positive relationship existed between the factors, as shown by the connection examination. Relapse examination shows that every one of the six variables essentially affect the predominance of stock exchanging applications utilized on the web.

According to the results of the survey, most people are aware of the numerous stock trading apps and software packages that can be found on the internet. Besides the fact that they know how to get to web based exchanging applications for stock exchanging, yet they likewise know how to utilize them appropriately on the lookout. As indicated by the creators, financial exchange research is winnowed from various sources, including scholarly distributions, monetary business sectors, papers, web-based entertainment, the on the web, the sites of financier organizations, and occasional updates delivered by the Public Stock Trade and Bombay Stock Trade. Information on the securities exchange and how to put resources into it very well might be stayed up with the latest

People's knowledge of internet exchanging stages is affected by their securities exchange money management tendencies. Individuals' viewpoints on financial exchange venture, whether great or negative, influence their insight into web based exchanging programs. The Indian stock market has been transformed by online mobile trading and investing apps, and as businesses transition from a digital to a conventional model, the Internet has provided a competitive advantage [52]. Momentary exchanges may likewise be worked with by web based exchanging stages.

Individuals who utilize internet exchanging applications to exchange stocks believe it's more secure and more reliable than different techniques. Utilizing a web exchanging project to exchange stocks represents no gamble. Many likewise stress that utilizing web based exchanging applications puts them at risk of cybercrime, for example, phishing, hacking, and cyber-attacks. Authorized firewall security applications are utilized for online installments, as indicated by the creators. Green venture is advanced and supportable money is improved by means of stock exchanging utilizing internet exchanging programs

Having a decent handle of individual budget is critical while utilizing these sorts of innovations, as indicated by the examination. The conviction that one's degree of monetary proficiency influences their capacity to utilize web exchanging devices to fabricate a beneficial portfolio is boundless. Moreover, they express that they need further preparation prior to being approved to utilize a web based exchanging system to pick the most reasonable stocks for exchanging. The use of such programs is influenced by the technical and financial aspects of stock trading as well as familiarity with the buying and selling of shares using online trading apps. The creators expressed that to appreciate financial backers and lessen the gamble related with monetary administrations and merchandise, one high priority information on and aptitude in evaluating such items and administrations

Having a decent handle of individual budget is essential while utilizing these sorts of innovations, as per the exploration. There is widespread belief that a person's ability to use online trading tools to build a profitable portfolio is influenced by their level of financial literacy. In addition, they state that additional training is

required before they can use an online trading program to select the best stocks for trading. The use of such programs is influenced by the technical and financial aspects of stock trading as well as familiarity with the buying and selling of shares using online trading apps. According to the authors, one must have knowledge of and expertise in evaluating such products and services in order to comprehend investors and reduce the risk associated with financial services and goods

CONCLUSION

The advent of stock trading applications has markedly influenced investor behavior in the National Capital Region, fostering an environment where the stock market is more accessible than ever before. The study's findings highlight a significant correlation between the adoption of these applications and factors such as user awareness, perceived benefits, and concerns regarding reliability and safety. Moreover, financial literacy and technical knowledge emerge as critical determinants of user adoption, underscoring the importance of informed investing. While dependency on traditional brokerage is diminishing, these applications are enabling investors to make more autonomous and informed decisions. This democratization of stock market investment is not without its challenges, particularly concerning security and the need for enhanced financial education among users. Nonetheless, the positive trajectory of these applications suggests a future where stock market investment is integrated into the broader fabric of digital commerce, enabling more inclusive participation in financial markets.

Future Scope: Looking forward, the study opens avenues for further research into the integration of artificial intelligence and machine learning technologies in stock trading applications to enhance decision-making and predictive analytics. Additionally, examining the long-term financial outcomes for users of these applications compared to traditional investing methods could provide deeper insights into their efficacy. As cyber security remains a paramount concern, future studies could also focus on developing more robust security protocols to protect investor data and transactions. Lastly, understanding the global implications of such technologies on emerging markets and the potential for cross-border investment opportunities could significantly contribute to the literature on financial technology and its impact on global economic participation.

References:

1. Adnan, M. Negi, J.S. and Kumari, R.(2023). Investigating the impact of ICT enabled business correspondent model on financial inclusion. *The Review of Finance and Banking*, Vol. 15(2), 89-100, <http://dx.doi.org/10.24818/rfb.23.15.02.01>.
2. Ananth, S, and Oncu,T.S. (2014). A Critical Look at the Expansion of Banking Services through the Business Correspondent Model: Observations from Andhra Pradesh.” *Economic and Political Weekly* 49 (8): 49–58.<https://www.jstor.org/stable/24479085>.
3. Asgarnezhad Nouri Bagher & Motamedi Samira & Soltani Milad, (2017). Empirical Analysis of the

Financial Behavior of Investors with Brand Approach (Case Study: Tehran Stock Exchange). *Scientific Annals of Economics and Business*, Sciendo, vol. 64(1), pages 97-121.

4. Ashraf,S. and Baig.M.A.(2015) Investment and trading strategies in Indian stock market. *International Journal of Arts and Commerce*, 4 (3), 1–15.
5. Avramov, Doron, Si Cheng, and Lior Metzker. (2022). Machine Learning vs. Economic Restrictions: Evidence from Stock Return Predictability. *Management Science* 69 (5): 2587-2619. <https://doi.org/10.1287/mnsc.2022.4449>
6. Azevedo, Vitor, and Christopher Hoegner. (2023). Enhancing stock market anomalies with machine learning. *Review of Quantitative Finance and Accounting* 60 (1): 195-230. 10.1007/s11156-022-01099-z.
7. Azevedo, Vitor, Georg Sebastian Kaiser, and Sebastian Mueller. (2023). Stock market anomalies and machine learning across the globe. *Journal of Asset Management* 24:419-441.<https://doi.org/10.1057/s41260-023-00318-z>.
8. Beck, Thorsten, Asli Demirguc-Kunt, and Maria Soledad Martinez Peria. (2007). Reaching out: Access to and Use of Banking Services across Countries. *Journal of Financial Economics* 85 (1): 234–66.<https://doi.org/10.1016/j.jfineco.2006.07.002>.
9. Bommer, W.H., Rana, S., & Milevoj, E. (2022). A meta-analysis of eWallet adoption using the UTAUT model. *International Journal of Bank Marketing*.DOI: 10.1108/IJBM-06-2021-0258
10. Brogaard, Jonathan, and Abalfazl Zareei. (2023). Machine Learning and the Stock Market. *Journal of Financial and Quantitative Analysis* 58, no. 4 (June): 1431-1472. <https://doi.org/10.1017/S0022109022001120>.
11. Caroline,A. Potrich,G. Vieira,K.M. Silva,W.M. (2015). Development of a financial literacy model for university students. *Management Research Review* 39 (3), 356–376, <https://doi.org/10.1108/MRR-06-2014-0143>.
12. Chao, C.M.(2019). Factors determining the behavioral intention to use mobile learning: an application and extension of the UTAUT model. *Front. Psychol.* 10,1–14, <https://doi.org/10.3389/fpsyg.2019.01652>.
13. Chatterjee, Amrita. (2020). Financial Inclusion, Information and Communication Technology Diffusion, and Economic Growth: A Panel Data Analysis. *Information Technology for Development* 26 (3): 607–35.<https://doi.org/10.1080/02681102.2020.1734770>
14. Chhimwal,B. Bapat,V. Gaurav.S.(2021). Investors’ preferences and the factors affecting investment in the Indian stock market: an industry view *Management of Finance* 47 (5),723–744, <https://doi.org/10.1108/MF-12-2019-0603>
15. Chong,L.L. Ong,H.B. Tan.S.H.(2021).Acceptability of mobile stock trading application: A study of young investors in Malaysia. *Technology in Society* 64,101497.<https://doi.org/10.1016/j.techsoc.2020.101497>.
16. .Chuang,S.S. Chang,M.C.(2013). Prospect theory and the investor’s attitudes toward risk. *Risk Decis. Anal.* 4 (4), 303–308. <https://doi.org/10.3233/RDA-130096>
17. Chuang,S.S. Chang,M.C.(2013). Prospect theory and the investor’s attitudes toward risk. *Risk Decis. Anal.* 4 (4), 303–308. <https://doi.org/10.3233/RDA-130096>
18. Das, Amar Nath, and Arindam Laha. (2020). Trend of IT Enabled Banking Correspondence Services and Its Determinants: Evidences from South Asian Countries. *Springer Nature*, 37–48.https://doi.org/10.1007/978-981-15-4206-0_4.
19. Fama,E.F. Fisher,L.Jensen,M.C. Roll,R.(1969). “The adjustment of stock prices to new information”. *Int. Econ. Rev.* 10 (1), 1–21.
https://www.worldwidejournals.com/paripex/recent_issues_pdf/2013/September/a-study-on-investment-pattern-

[and-awareness-of-salaried-class-investors-in-coimbatore-district_September_2013_1909461009_0401156.pdf](#)

20. Jenna Florendo & Hooman Estelami, (2019). The role of cognitive style, gullibility, and demographics on the use of social media for financial decision making," *Journal of Financial Services Marketing*, Palgrave Macmillan, vol. 24(1), pages 1-10.
21. Khalaf,E.A. and Choe,P.(2020). Increasing customer trust towards mobile commerce in a multicultural society: a case of Qatar". *Journal of Internet Commerce*. 19 (1), 32–61
22. Lackmann,L. Ernstberger,J. and Stich, M.(2012). Market reactions to increased reliability of sustainability information. *J. Bus. Ethics* 107 (2) (2012) 111–128
23. Lalitha,A. and Surekha,M.(2008). Retail Investor in Indian Capital Market: Profile, Pattern of Investment and Profitability. *The Indian journal of commerce*, vol. 61, no.3, pg. no: 53.
24. .Lyons,A.C.and Hanna,J.K.(2021). A methodological overview to defining and measuring digital financial literacy. *Fin. Plann. Rev.* 4 (2), e1113
25. Mishra, R.(2018). Financial literacy, risk tolerance and stock market participation. *Asian Econ. Financ. Rev.* 8 (12), 1457–1471.<https://doi.org/10.18488/journal.aefr.2018.812.1457.1471>
26. Mitchell,O.S. Lusardi,A.(2015). Financial literacy and economic outcomes: Evidence and policy implications. *The journal of retirement* 3 (1) (2015), 107
27. Nair, P.S., Shiva, A., Yadav, N. and Tandon, P. (2023). Determinants of mobile apps adoption by retail investors for online trading in emerging financial markets, *Benchmarking: An International Journal*, Vol. 30 No. 5, pp. 1623-1648. <https://doi.org/10.1108/BIJ-01-2022-0019>
28. Nakorji,M. and Aminu,U.(2022).Forecasting inflation using machine learning techniques". *The Review of Finance and Banking*, Vol.14 (1), 45-65.<http://dx.doi.org/10.24818/rfb./22.14.01.04>.
29. Obamuyi, T.M.(2013). Factors influencing investment decision in capital market: a study of individual investors in Nigeria. *J. Org. Markets Emerging Econ.* 4 (1),141–161.<https://www.journals.vu.lt/omee/article/view/14263>.
30. Oh,NatalieY. & Parwada,Jerry T.& Walter,Terry S.(2008). Investors' trading behavior and performance: Online versus non-online equity trading in Korea. *Pacific Basin Finance Journal*, Elsevier, vol.16 (1-2), 26-43
31. Petric (Iancu) Ioana Ancuta, (2015). "Benefits and Drawbacks of Online Trading Versus Traditional Trading Educational Factors in Online Trading, *Annals of Faculty of Economics, University of Oradea, Faculty of Economics*, vol. 1(1), pages 1253-1259
32. Pinasti,U.S. Astuti,M.Y. Rakhmawati,R. Achiria,S. and Pusparini,M.D.(2022). Innovation features of digital literacy services in Shariah online trading system (Sots) application in an effort to minimize the risk of investing *KnE Social Sciences*,248260.<https://knepublishing.com/index.php/KnESocial/article/view/11363/18535>
33. Prabhu,A. and Gajendran,A.(2021). Descriptive study on investors' stock market awareness and their perception towards investment pattern (with special reference to Tamil Nadu). *Nat. Volatiles & Essent. Oils* 8 (4), 14318–14330.<https://www.nveo.org/index.php/journal/article/view/3074/2582>
34. Roca, J.C. García, J.J.Vega,JJ.(2009). The importance of perceived trust, security and privacy in online trading systems. *Information Management & Computer Security* 17 (2), 96113.<https://www.emerald.com/insight/content/doi/10.1108/09685220910963983/full/html>
35. Sajad Rezaei, Milad Kalantari Shahijan, Muslim Amin & Wan Khairuzzaman Wan Ismail (2016) Determinants of App Stores Continuance Behavior: A PLS Path Modelling Approach, *Journal of Internet Commerce*, 15:4, 408-440, DOI: 10.1080/15332861.2016.1256749.
36. Satish,N. and Bheemanagouda. (2023). Indian Stock Market Regularity: The Turn of the Month Effect. *The Review of Finance and Banking*, Vol.15 (2), 101-118.<http://dx.doi.org/10.24818/rfb.23.15.02.02>.
37. Shankar,M.G. Bhatt,K.(2022). A study of the level of stock market investment awareness among

young entrepreneurs, with a focus on the Mumbai region. *Journal of Positive School Psychol.* 6 (2), 4947–4953

38. Singh,A. Malhotra.M.(2016). Factors influencing the adoption of online trading: a study of individual investors. *IOSR J. Bus. Manag.* 18 (10), 21–26.
39. Sung,H.N. Jeong,D.Y. Jeong,Y.S.and Shin,J.I.(2015). The relationship among self-efficacy, social influence, performance expectancy, effort expectancy, and behavioral intention in mobile learning service. *Int. J. U- E- Serv., Sci. Technol.* 8 (9), 197–206
40. Trang,P.T.M.and Tho,N.H.(2017). Perceived risk, investment performance and intentions in emerging stock markets. *Int. J. Econ. Financ. Issues* 7 (1), 269–278
41. Umamaheswari,S. and Kumar, M.A.(2013). A study on investment pattern and awareness of salaried class investors in Coimbatore district. *Indian Journal Research*, 31–34
42. Valappil,S.C. and Nishad,T.M.(2023). Performance and Network Analysis of Research in Stock Market Anomalie. *The Review of Finance and Banking*, Vol.15 (2), 119-135. <http://dx.doi.org/10.24818/rfb.23.15.02.02>.
43. Wasiq M, Johri A, Singh P. (2022). Factors affecting adoption and use of M-commerce services among the customers in Saudi Arabia”. *Heliyon.*;8(12):e12532. doi: 10.1016/j.heliyon.2022.e12532.
44. Wasiq,M. Ahmad,N.Burney,M.T. and Anwar,M.(2018).Consumers’ Perception toward security of M-commerce transactions-An empirical study. *Global Sci-Tech* 10 (1),11–21.
45. Xu,C.W. and Utkus,S.P.(2019). *The Digital Investor: Financial Attention through Multiple Digital Channels*. Valley Forge, PA: Vanguard Research
46. Yu,C.S.(2012). Factors affecting individuals to adopt mobile banking: Empirical evidence from the UTAUT model. *Journal of electronic commerce research*, 13 (2), 104.<http://www.jecr.org/node/48>