

# STOCK MARKET TRADING THROUGH MOBILE APPLICATIONS: AN ANALYSIS OF YOUNG INVESTORS FROM GUJARAT

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## INTRODUCTION

### STOCK MARKET

The stock market in India plays a crucial role in the country's economy and provides a platform for companies to raise capital and investors to participate in the growth potential of businesses. Here is an overview of the stock market in India:

1. **Exchanges:** The primary stock exchanges in India are the National Stock Exchange (NSE) and the Bombay Stock Exchange (BSE). These exchanges provide the trading platform for equities, derivatives, commodities, and other financial instruments.
2. **Indices:** The most widely followed stock market indices in India are the Nifty 50 and the Sensex. The Nifty 50 represents the top 50 companies listed on the NSE, while the Sensex consists of 30 actively traded stocks on the BSE. These indices serve as benchmarks to track the overall market performance.
3. **Market Participants:** The Indian stock market has a diverse range of participants, including retail investors, institutional investors, foreign institutional investors (FIIs), mutual funds, insurance companies, and high-net-worth individuals. These participants contribute to the liquidity and depth of the market.
4. **Securities:** The Indian stock market allows trading in various securities such as stocks (equities), derivatives (futures and options), exchange-traded funds (ETFs), mutual funds, and bonds. This enables investors to diversify their portfolios and manage risk.
5. **Regulatory Framework:** The Securities and Exchange Board of India (SEBI) is the regulatory authority that oversees the Indian securities market. SEBI ensures fair and transparent dealings, investor protection, and the smooth functioning of the market. It formulates rules and regulations and monitors market activities.
6. **Market Volatility:** The Indian stock market experiences volatility influenced by a variety of factors, including domestic and global economic indicators, corporate earnings, government policies, geopolitical events, and investor sentiment. Market fluctuations provide opportunities for investors and traders.
7. **Trading Hours:** The regular trading session in the Indian stock market is from 9:15 am to 3:30 pm Indian Standard Time (IST), Monday to Friday, except on trading holidays. Pre-market and post-market sessions are also available for specific trading activities.
8. **Market Capitalization:** The market capitalization of the Indian stock market is significant and ranks among the largest globally. It represents the total value of listed companies' outstanding shares and serves as an indicator of the market's size and depth.
9. **Technology and Digital Transformation:** The Indian stock market has witnessed technological advancements and digital transformation, enabling online trading platforms, mobile apps, algorithmic trading, and high-frequency trading. These innovations have made trading more accessible and efficient.
10. **Investor Education and Awareness:** SEBI and stock exchanges conduct investor awareness programs to educate investors about market dynamics, investment strategies, risk management, and regulatory compliance. It promotes investor protection and encourages informed investment decisions.

### ONLINE STOCK BROKERING APPS

There are several online stockbroking apps available in India that allow investors to trade in the stock market conveniently using their smartphones. Here are some popular online stockbroking apps:

1. **Zerodha Kite:** Zerodha Kite is the mobile trading app offered by Zerodha, one of the largest discount brokers in India. It provides a user-friendly interface, advanced charting tools, real-time market data, and the ability to trade across various segments.
2. **Upstox:** Upstox is a popular online discount broker in India, and it offers a mobile trading app called Upstox Pro. The app provides a seamless trading experience with features like advanced charting, order placement, real-time market data, and more.

3. **5Paisa:** 5Paisa is a discount broker that offers a mobile trading app called 5Paisa - Online Share Market Trading App. It provides trading and investment services in equities, derivatives, commodities, mutual funds, and more.
4. **ICICI Direct:** ICICI Direct, a subsidiary of ICICI Bank, offers a mobile trading app called ICICI Direct Mobile App. It allows users to trade in equities, derivatives, mutual funds, IPOs, and fixed income products.
5. **HDFC Securities:** HDFC Securities provides a mobile trading app called HDFC securities MobileTrading App. It offers a wide range of features, including real-time market updates, personalized watchlists, technical analysis tools, and more.
6. **Angel Broking:** Angel Broking offers a mobile trading app called Angel Broking -Share Market App. The app provides a user-friendly interface, real-time market updates, research reports, and personalized advisory services.
7. **Kotak Stock Trader:** Kotak Stock Trader is the mobile trading app offered by KotakSecurities. It allows users to trade in equities, derivatives, currencies, mutual funds, and more. The app provides real-time streaming quotes, advanced charting tools, and market research reports.

These are just a few examples of online stockbroking apps available in India. It's important to consider factors like ease of use, features, reliability, security, and customer support when choosing a stockbroking app.

## LITERATURE REVIEW

### 2.1 INTRODUCTION

The rapid advancement of technology has significantly transformed the landscape of stock market participation, with the emergence of online brokerage apps revolutionizing the way investors engage in trading activities. These digital platforms have provided investors with unprecedented convenience, accessibility, and real-time market information, empowering them to make investment decisions at their fingertips. This literature review aims to assess the impact of online brokerage apps on investor viewpoint and decision-making in the stock market.

The advent of online brokerage apps has witnessed a paradigm shift in how investors perceive and approach stock market investments. Traditional barriers such as geographical limitations and physical presence have been dismantled, allowing a broader range of individuals to enter the market. The review explores how the accessibility and user-friendly interfaces of these apps have influenced investor sentiment, confidence, and engagement with the stock market.

Furthermore, the review examines the impact of online brokerage apps on the decision-making process of investors. These platforms provide investors with a wealth of real-time data, research tools, and financial insights, enabling them to analyse market trends, company fundamentals, and performance indicators more efficiently. It investigates how this availability of information influences investment strategies, risk assessment, and portfolio diversification decisions.

### 2.2 LITERATURE REVIEW

Sharma and Singh (2019) examined the impact of economic conditions and market volatility on investor behaviour. They found that during periods of economic downturn, investor sentiment tends to be more pessimistic, leading to increased risk aversion and reduced investment activity.

Kapoor et al. (2018) focused on the influence of risk perception on investor decision-making. Their study revealed that investors with higher risk tolerance tend to be more inclined towards equity investments, while those with lower risk tolerance prefer safer investment options such as fixed income securities or mutual funds.

Joshi and Gupta (2020) explored the role of information asymmetry in shaping investor confidence and perception. Their findings indicated that investors who perceive a higher level of information asymmetry in the stock market tend to exhibit lower levels of confidence and are more likely to rely on external sources for investment advice.

Jain and Agarwal (2018) investigated the impact of regulatory frameworks and investor protection measures on investor perception. Their study found that strong regulatory frameworks and effective investor protection mechanisms positively influence investor confidence and trust in the market.

Kumar and Verma (2019) conducted research on behavioural biases and their influence on investor perception.

The study revealed that biases such as overconfidence and herd behaviour significantly impact investor decision-making and can lead to suboptimal investment outcomes.

Gupta et al. (2020) explored the impact of technological advancements in the form of online trading platforms and mobile apps. Their study highlighted the positive impact of these platforms on investor perception, including increased accessibility, convenience, and real-time information.

### 2.3 RESEARCH GAP

The justification for conducting research on assessing the impact of online brokerage apps on investor viewpoint and decision-making in the stock market lies in the existing gap in past studies. While a few studies have explored the impact of online brokerage apps on investor viewpoint, there is a lack of research specifically focusing on the perception of Gujarat-based investors who use online brokerage apps for stock market decision-making. Additionally, no study has been conducted that interviews a substantial sample size of 1000 investors. These gaps in the literature underscore the need for this research. By addressing these limitations, the study aims to fill the following gaps:

1. **Limited Scope of Previous Studies:** Previous studies have examined the impact of online brokerage apps on investor viewpoint in a broader context. However, there is a lack of research that specifically focuses on the perception and decision-making of investors from Gujarat using online brokerage apps for stock market-related decisions. This research addresses this gap by specifically targeting Gujarat-based investors.
2. **Lack of Sufficient Sample Size:** While previous studies have explored the impact of online brokerage apps, the sample sizes have been relatively small. In this study, the inclusion of a substantial sample size of 1000 investors enhances the credibility and reliability of the findings, providing a more comprehensive understanding of the impact of online brokerage apps on investor viewpoint and decision-making.
3. **Geographic Specificity:** Gujarat, a prominent financial hub in India, represents a unique investor base with distinct characteristics and preferences. By focusing on Gujarat-based investors, this research accounts for regional factors that may influence investor perception and decision-making, thus contributing to a more comprehensive understanding of the impact of online brokerage apps in a specific context.

## RESEARCH METHODOLOGY

### 3.1 INTRODUCTION

The research methodology section plays a critical role in any study as it outlines the systematic approach and methods employed to gather, analyse, and interpret data. This section provides a roadmap for conducting the research and ensures the reliability and validity of the findings. In this study on assessing the impact of online brokerage apps on investor viewpoint and decision-making in the stock market, the research methodology encompasses various elements that will be discussed in this chapter.

### 3.2 TITLE OF THE STUDY

Title of the study is : *“STOCK MARKET TRADING THROUGH MOBILE APPLICATIONS: AN ANALYSIS OF YOUNG INVESTORS FROM GUJARAT”*

### 3.3 SIGNIFICANCE OF THE STUDY

The significance and importance of the study are as follows:

1. **Understanding Investor Behaviour:** The study provides insights into how online brokerage apps influence investor behaviour, decision-making processes, and risk perceptions. This understanding is crucial for market participants, regulators, and researchers to develop strategies that align with investor preferences and enhance market participation.
2. **Investor Empowerment:** Online brokerage apps have revolutionized investor access to real-time market information, research tools, and investment opportunities. By assessing their impact, the study highlights the potential of these apps to empower investors by providing them with greater control over their investment decisions.
3. **Market Efficiency:** Examining the impact of online brokerage apps on investor decision-making contributes to the understanding of market efficiency. Understanding how these apps shape investor behaviour can shed light on the potential implications for market liquidity, price discovery, and overall market dynamics.

4. **Technological Advancements:** The study acknowledges the transformative power of technology in the financial industry. By analysing the impact of online brokerage apps, it underscores the significance of technological advancements and their role in reshaping the stock market landscape.
5. **Investor Protection:** Assessing the impact of online brokerage apps on investor viewpoint and decision-making can help identify potential risks and vulnerabilities. This understanding can guide policymakers and regulators in formulating appropriate investor protection measures and ensuring the integrity and fairness of the stock market.
6. **Market Accessibility and Inclusivity:** Online brokerage apps have the potential to democratize stock market participation by removing geographical barriers and increasing accessibility. By exploring their impact, the study can contribute to efforts aimed at promoting inclusivity and expanding investor participation in the stock market.
7. **Policy Implications:** The study's findings can inform policy decisions related to the regulation and oversight of online brokerage apps. Understanding their impact on investor behaviour can guide policymakers in establishing frameworks that promote investor education, transparency, and market integrity.

### 3.4 NEED FOR THE STUDY

The need for studying the impact of online brokerage apps on investor viewpoint and decision-making in the stock market arises due to several reasons:

1. **Technological Advancements:** Online brokerage apps have gained significant popularity and usage in recent years, enabling investors to access the stock market with ease and convenience. Understanding the impact of these apps is crucial in keeping up with the evolving landscape of technology-driven financial services.
2. **Changing Investor Behaviour:** The availability of online brokerage apps has transformed the way investors perceive and engage with the stock market. It is essential to study how these apps influence investor viewpoint and decision-making to adapt to the changing needs and preferences of investors.
3. **Accessibility and Inclusivity:** Online brokerage apps have the potential to increase market accessibility and inclusivity by reaching a wider range of investors, including those from remote areas or with limited financial resources. Assessing their impact helps identify opportunities and challenges in promoting equal access to the stock market.
4. **Investor Empowerment:** With real-time market data, research tools, and trading capabilities, online brokerage apps empower individual investors by providing them with greater control over their investment decisions. Understanding the impact of these apps helps assess the level of empowerment and its implications for investor outcomes.
5. **Risk and Investor Protection:** As online brokerage apps offer convenient access to the stock market, it is essential to evaluate their impact on investor risk perception and decision-making. This analysis can identify potential risks associated with app usage and guide efforts to strengthen investor protection measures.
6. **Market Efficiency and Dynamics:** Assessing the impact of online brokerage apps contributes to the understanding of market efficiency and dynamics. It helps identify the influence of these apps on market liquidity, price discovery, trading volumes, and overall market functioning.
7. **Policy and Regulatory Considerations:** Studying the impact of online brokerage apps is crucial for policymakers and regulators. It helps them assess the need for regulatory interventions, develop guidelines for app providers, and ensure investor protection while fostering innovation and competition in the stock market ecosystem.

### 3.5 RESEARCH OBJECTIVE

1. To study the overview of stock market and functionality of stock brokerage applications.
2. To analyse the perception of the investors towards online stock brokerage applications.
3. To examine the factors motivate investors using online brokering applications.
4. To find out relation between demographic profile of the investors and their perception towards online stock brokerage applications.

### 3.6 RESEARCH QUESTIONS

1. What are the key features and functionalities offered by online stock brokerage applications?
2. How do online stock brokerage applications facilitate investment activities in the stock market?
3. What are the advantages and disadvantages of using online stock brokerage applications compared to traditional brokerage methods?
4. What are the investors' views on the ease of use and user interface of online stock brokerage applications?
5. How do investors assess the quality and timeliness of information provided by online stock



- brokerage applications?
- 6 What are the perceived benefits and drawbacks of using online stock brokerage applications in terms of investor decision-making and portfolio management?
  - 7 What are the primary reasons for investors choosing online brokerage applications over traditional brokerage services?
  - 8 How do investors perceive the cost-effectiveness and affordability of using online brokerage applications?
  - 9 Does the level of investment experience influence investors' attitudes towards online stock brokerage applications?
  - 10 Are there any variations in the perception of online stock brokerage applications based on investors' portfolio size or income level?

### 3.7 SCOPE OF THE RESEARCH STUDY

The scope of this study is as follows:

1. **Geographic Scope:** The study focuses on investors from Gujarat, specifically targeting four major cities: Ahmedabad, Baroda, Surat, and Rajkot. These cities represent significant financial centers in Gujarat and provide a diverse representation of investors using online brokerage apps for stock market decision-making.
2. **Sample Size:** The study aims to interview a total of 1000 investors who actively use online brokerage apps for their stock market-related decisions. The sample will be divided equally among the four cities, with 250 investors selected from each city.
3. **Investor Profile:** The study targets individual investors who have been using online brokerage apps for a considerable period and have engaged in stock market investments. The selected investors may have varying levels of experience, investment strategies, risk tolerance, and financial goals.

### 3.8 SOURCES OF DATA

In this study, both primary and secondary sources of data will be utilized. The sources of data are as follows:

**Primary Data:**

Primary data will be collected through interviews conducted with 1000 investors based in Gujarat. These interviews will be structured using questionnaires specifically designed to explore investor perception, decision-making processes, and the impact of online brokerage apps on their investment behaviour. The primary data collected through interviews will provide direct insights from the investors themselves and offer valuable qualitative information for the study.

**Secondary Data:**

Secondary data will be gathered from various sources to complement the primary data and provide additional context for the study. These sources may include:

1. **Academic Journals and Research Papers:** Relevant literature published in academic journals and research papers will be reviewed to gain insights into the existing body of knowledge on investor behaviour, online brokerage apps, and stock market decision-making. This will help establish a theoretical framework and support the study's findings.
2. **Reports and Publications:** Reports and publications from regulatory bodies, financial institutions, and market research firms will be accessed to gather data on market trends, investor demographics, app usage statistics, and regulatory developments. These sources will provide valuable information for analysing the impact of online brokerage apps on investor viewpoint and decision-making.
3. **Online Databases and Financial Websites:** Online databases and financial websites will be utilized to collect relevant data on stock market performance, investment products, and technological advancements in the online brokerage industry. These sources will contribute to the contextual understanding of the study.

### 3.9 SAMPLING TECHNIQUE

The sampling technique used in this study is a combination of purposive sampling and stratified sampling. Each technique serves a specific purpose in ensuring a representative and diverse sample of participants.

1. **Purposive Sampling:** Purposive sampling is employed in the initial selection of the cities for the study, namely Ahmedabad, Baroda, Surat, and Rajkot. These cities were chosen deliberately due to their significance as major financial centers in Gujarat. By purposively selecting these cities, the study aims to capture the perspectives and experiences of investors from key financial hubs.
2. **Stratified Sampling:** Within each selected city, stratified sampling is utilized to ensure a representative sample of investors. The investor population is divided into homogeneous subgroups or strata based on specific criteria such as age, gender, investment experience, and portfolio size. Stratified sampling allows for proportional representation of participants from each subgroup in

the final sample.

### 3.10 SAMPLE SIZE

The study aims to target a sample size of 250 investors from each of the four cities in Gujarat, namely Ahmedabad, Baroda, Surat, and Rajkot. This will result in a total sample size of 1000 investors for the study. By including an equal number of participants from each city, the study aims to ensure a balanced representation of investor perspectives and experiences across these major financial centres in Gujarat. This sample size will allow for a comprehensive analysis of investor perception and decision-making related to online brokerage apps in the context of the stock market.

### 3.11 TOOLS AND TECHNIQUES FOR DATA ANALYSIS

In this study, several tools and techniques will be utilized for data analysis. The following methods will be employed:

**Frequency Analysis:** Frequency analysis will be used to examine the distribution and frequency of responses to different survey questions. This analysis will provide insights into the prevalence of specific perceptions, preferences, and behaviours among the sampled investors.

**Kruskal-Wallis Test:** The Kruskal-Wallis test is a non-parametric statistical test used to determine if there are any significant differences between multiple groups. In this study, the Kruskal-Wallis test may be employed to analyse the impact of online brokerage apps on investor viewpoint and decision-making across different cities, considering variables such as satisfaction levels, perceived benefits, or risk perceptions.

**Chi-Square Test:** The chi-square test is a statistical test used to determine if there is a significant association between two categorical variables. In this study, the chi-square test may be applied to examine the relationship between different demographic factors (such as age, gender, or investment experience) and specific perceptions or behaviours related to online brokerage app usage in the stock market.

**One-Sample Test:** The one-sample test is a statistical test used to compare a sample mean with a known or hypothesized population mean. In this study, a one-sample test might be employed to assess the level of investor satisfaction with online brokerage apps by comparing the obtained satisfaction scores with a predetermined benchmark or expected level.

### 3.12 HYPOTHESIS OF THE RESEARCH STUDY

#### NULL HYPOTHESIS

1. Investors do not perceive online stock brokerage applications as user-friendly and offering a seamless user experience.
2. Investors do not believe that online stock brokerage applications provide them with timely and accurate information for making investment decisions.
3. Online brokerage applications do not offer features and tools that enhance investor decision-making and portfolio management, thus motivating their usage.
4. Convenience, accessibility, and mobility do not play a crucial role in investors' decision to use online brokerage applications.
5. There is no difference in the perception of online stock brokerage applications between male and female investors.

#### ALTERNATIVE HYPOTHESIS

1. Investors perceive online stock brokerage applications as user-friendly and offering a seamless user experience.
2. Investors believe that online stock brokerage applications provide them with timely and accurate information for making investment decisions.
3. Online brokerage applications offer features and tools that enhance investor decision-making and portfolio management, thus motivating their usage.
4. Convenience, accessibility, and mobility play a crucial role in investors' decision to use online brokerage applications.
5. There is a difference in the perception of online stock brokerage applications between male and female investors.

### 3.13 LIMITATIONS OF THE STUDY

1. **Geographic Scope:** The study is limited to Gujarat-based investors only. By focusing exclusively on investors from Gujarat, the findings may not be generalizable to investors from other regions or states in India. The investment behaviour, preferences, and perceptions of investors in Gujarat may differ from those in other parts of the country, potentially limiting the broader applicability of the study's conclusions.
2. **Sample Size:** The study targets a sample size of 1000 investors, with 250 investors each from four cities in Gujarat. While this sample size provides valuable insights, it is important to note that the findings may not represent the entire population of Gujarat-based investors or capture the full diversity of investor characteristics and perspectives within the region. The generalizability of the study's findings may be limited to the sampled population.
3. **Self-Reporting Bias:** The study relies on self-reported data gathered through interviews with investors. This introduces the possibility of self-reporting bias, where participants may provide responses that align with social desirability or their own perceptions. The accuracy and reliability of the data collected are subject to the participants' recall ability and willingness to disclose certain information, potentially impacting the validity of the study's findings.
4. **Applicability to Other Online Brokerage Apps:** The study focuses on the impact of online brokerage apps on investor viewpoint and decision-making, but it may not account for variations across different apps available in the market. The findings may be specific to the apps used by the participants in this study and may not fully represent the impact of other online brokerage apps or platforms.
5. **Lack of Control Group:** This study does not include a control group of investors who do not use online brokerage apps for comparison. Without a control group, it may be challenging to attribute specific outcomes solely to the usage of online brokerage apps and differentiate them from other factors that could influence investor viewpoint and decision-making.
6. **Time Constraints:** The study is conducted within a specific timeframe, which may limit the ability to capture long-term changes or developments in investor perception and behaviour related to online brokerage apps. The findings may not account for potential shifts in the market or advancements in technology that could influence investor decisions beyond the study period.

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