

**“ANALYSIS OF CUSTOMER SENTIMENTS TOWARDS SERVICE QUALITY OF
INDIAN STOCK BROKERS USING TEXT MINING TECHNIQUE”**

FSC413: Project Work Report

Credits: 4

Submitted To

Goa University

In partial fulfilment of

Master of Business Administration (Financial Services)

By

ROHAN RAMACHANDRA HEGDE

Roll Number-26

Under the Guidance of

Dr Harip Khanapuri

Associate Professor

Goa Business School

MBA (Financial Services)



April 2023

Examined by

Seal of School

DECLARATION BY STUDENT

I, hereby declare that the data presented in this project work report entitled "**ANALYSIS OF CUSTOMER SENTIMENTS TOWARDS SERVICE QUALITY OF INDIAN STOCK BROKERS USING TEXT MINING TECHNIQUE**" is based on the results of investigations carried out by me in the MBA (Financial services) at the Goa Business school, Goa University under the supervision of **Dr Harip Khanapuri** and the same has not been submitted elsewhere for the award of degree or diploma by me. Further, I understand that Goa University or its authorities will not be responsible for the correctness of observations or other findings given in the report.

I hereby authorize the University authorities to upload this to Dissertation repository or anywhere else as the UGC regulations demand and make it available to any one as needed.

ROHAN RAMACHANDRA HEGDE

Roll Number-.26

MBA (FINANCIAL SERVICES)

Goa Business School

Date:

Place :GOA UNIVERSITY

COMPLETION CERTIFICATE

This is to certify that the dissertation “**ANALYSIS OF CUSTOMER SENTIMENTS TOWARDS SERVICE QUALITY OF INDIAN STOCK BROKERS USING TEXT MINING TECHNIQUE**” is a bonafide work carried out by **Mr. ROHAN RAMACHANDRA HEGDE** under my supervision in partial fulfilment of the requirements for the award of the degree of **Master Of Business Administration** in the Discipline **Financial Services** at the Goa business school ,Goa University.

DR. HARIP KHANAPURI

ASSOCIATE PROFESSOR

MBA (FINANCIAL SERVICES)

Date:

PROF. JYOTHI PAWAR

School Stamp

MBA (FINANCIAL SERVICES)

GOA BUSINESS SCHOOL

Date:

Place: GOA UNIVERSITY

TABLE OF CONTENTS

S.R.NO	PARTICULARS	PAGE NO
	CHAPTER I INTRODUCTION	
1.1	INTRODUCTION	5
1.2	LITERATURE REVIEW	5
1.3	RESEARCH GAP	10
1.4	OBJECTIVES OF STUDY	11
1.5	RESEARCH METHODOLOGY	11
1.6	LIMITATIONS OF THE STUDY	12
	CHAPTER II ANALYSIS AND DISCUSSION	
2.1	SENTIMENT ANALYSIS WORKFLOW	13
2.1.1	POSTIVE AND NEGATIVE SENTIMENTS	13
2.1.2	BAR CHART REPRESENTATION OF SENTIMENT SCORE	14
2.1.3	WORD CLOUD REPRESENTATION OF TEXT DATA	15
	CHAPTER III FINDINGS AND CONCLUSION	
3.1	FINDINGS	34
3.2	CONCLUSION	36
3.3	REFERENCES	37

CHAPTER I INTRODUCTION

1.1 Introduction

Over the period of years, we have seen increase in no of investors participation towards stock market. With growth in technology many investors started to learn about stock market so they could invest on their own research do not become dependent on brokers recommended stocks and then discount brokers made entry which provided similar services at low cost so many investors shifted towards discount brokers. Brokers are internal part of stock market as they are the intermediaries between the exchange and clients for various things. Brokers help clients to provide various kind of services such as portfolio management, buying and selling of stocks, research reports, chart analysis and providing knowledge about stock market through videos, blogs so on. Investors place more attention towards service quality provided by brokers in order to select good stock broker for investing in stock market and brokers should have more emphasis on the service quality to maintain customer satisfaction as well as customer loyalty.

Sentiment analysis is a tool where we can get to know about the opinion about clients regarding the different product/services provided by showing Positive and Negative sentiments score in excel. Sentiment analysis also provides most keywords in the form of word cloud.

1.2 Literature Review

S. Ahmed (2011) evaluates the service quality of stock brokers in Bangladesh in order to understand the requirements and expectations of the client. It used SERVQUAL model. Various factors like tangibles, reliability, possession, trustworthiness, competence, courtesies, assurance, empathy, gender, age group. education, were examined. The findings of performance matrix of brokers service quality were measured in four Quadrants. Quadrant A reveals the most remarkable contribution of the research finding in which service expectation of the clients at the stockbrokers is high but quality of the services is perceived as low Quadrant

B is more in line with expectations. Quadrant C fails to meet client expectations. Quadrant D is more in line with the views of customers. Yet, as consumers do not place as much significance on these service features, stockbrokers may choose to place less emphasis on them and divert resources towards enhancing the service quality. The investors who purchase and sell stocks and securities at the various Bangladesh stockbrokers are dissatisfied with the standard of service they get.

R.Fowdar, S. Fowdar and V.Hanuman (2018) shows connection between market orientation, service quality, and the business profitability of stockbrokerage organisations when providing for their esteemed clients. Business performance, marketing concentration, and service quality were found to be Positively correlated. This study findings showed the people working Mauritius stock brokers were mostly males, it provided evaluation service quality was good, the stock brokerage firms were market orientated and the returns provided by brokers to customers was above the expectations. This study found that stock broker firms in Mauritius provide good services to their clients and provide at least 56 % percent return on assets.

X. Lin and B. Wei (1999) evaluates the service quality expectations for securities brokerage services. The study findings reveal five service quality factors that individual investors consider when selecting a brokerage business using the SERVQUAL framework. The methods used are SERVQUAL model and PZB model, gap theory factors such as tangible, responsiveness, reliability, and empathy assurance are the methods used by brokerage companies to more effectively manage service delivery and communicate to current and potential clients. Servqual framework finds high consistency in perception service quality against other firms. Customers provide highest attention to brokerage service and trust be attentive sympathy and female more weights than males. According to this study findings, female and male investors may rely differentially on various cues to infer service quality of brokerage firms, compared to younger clients, older clients place significantly more importance on brand equity when selecting a

brokerage firm. The research attempts to make contributions to service marketing literature by investigating an overlooked brokerage/investment advisory business in terms of customer expectations of service quality .according the paper they prefer brokerage firms which are trustworthy and are in market more than 5to 10 years for better experience and also look at reputation of brokerage firms with brand equity.

J. Kaur (2022) shows impact of stock brokers services on the trust and confidence of retail investors .This study helps to know equity investors satisfaction with stock broker services. Methodology used is Survey ,Ordinal Regression Model ,Factor Analysis ,Five-point Likert scale the findings highlighted variables such as quick assistance transaction services ,knowledge ,technical analysis, account opening, accurate trading information. speediness of account settled portfolio management ,fair brokerage costs. Investors are happy with financial planning for retirement strategies and it is important for government policy makers with recent times the volume in market has increased post covid.

R. Chan and y.k Chan (2000) analyses how to select a broker or brokerage firm to invest in Hong Kong stock market through segmentation of investors .The selection criteria efficient service ,integrity ,good experience , information research facilities, appropriate qualification. In this study brokers were dividing into two parts that is one who provided service through telephone were preferred by professional investors and one who offices in busy roads were mostly preferred by full time investors. the methods used were Questionaries ,Kaiser Meyer Olkin measure ,Cluster Analysis ,SPSS software ,Discrimant Analysis, Anova model. This study showed findings which divided into four parts that is gambler (risk preferred),experienced (independent),service seekers, educated green horns and some of the variable such as credibility ,size, special offers and understanding clients. The study found that investors in Hong were not homogenous and the educated green horn wanted new services like portfolio ,investment review services. In conclusion it provides competitional approach for providing a

which combines demographic and self-concept to provide a full picture of investors and ways to bring new clients.

L. Chee , Meredith and Marchant (2008) analyses Singapore stock broking service quality and its purpose was to use servqual instrument to provide creative analysis of customer service value, customer satisfaction loyalty, demographic characteristics .The methodology used is servqual model, seven Likert model and factors such as reliability ,possession, trustworthy and tangibles. According to the author findings as per implications for investors have more realistic expectations and online trading made simpler to get simpler research reports with good information which helped the brokers more focus on development. According to author findings as per implications for industries towards customer loyalty and shows that brokers should devote more efforts to improve their service quality. In conclusion demographic characteristics of brokers customer had small relationship to service quality. customers with higher knowledge were more depend on good services and there lacks a bonding between broker towards customer in terms of services he receives but what he delivers towards them.

U. Hannover, L.Stuhl und K. sum (2005) analyses Ignorant Advice – Customer Advisory Service for Ethical Investment Funds .The methods used is serqual model factors such as private investors ,insurance companies ,financial information, costs, research process, adequacy ,screening approach where as advisor behaviour depends on these elements that is assurances ,tangibles, empathy, responsiveness and content of advice is on reliability. According to author findings it showed there was less information for investors to build a portfolio and mostly investor were dependent on advisor than on banks. The empirical analysis has highlighted a very low quality of financial advisory service for ethical funds in German retail banks.

T.Murhadi , D.Purnamasari , Suhad (2022) analysis of investor loyalty on stock brokerage companies . This research shows the impact of e-service quality, brand image and trust on investor satisfaction as well as its impact on stock investor loyalty in Aceh Province. The methodology used is structural models ,questionaries and used factors like satisfaction loyalty-service quality, brand equity . It shows results of data analysis found that there was a Positive and significant effect of service quality, brand image and trust on investor satisfaction.

Z. Yang and X. Fang (2004) determines Online service quality dimensions and their relationships with satisfaction with the help of content analysis of customer reviews .the methods used are netnography , factors such as responsiveness, reliability ,competence ,access, security ,ease of use ,portfolio service credibility accuracy of online trading system .In conclusion provide both theoretical contributions to the knowledge body of online service quality and practical implications for online service providers.

M. Kaur and T. Vohra (2015) determines factors affecting for the selection of financial advisor for women who are interested to invest in stock market living in Punjab. It also determines attributes the women look for before picking a financial advisor which should same as demographics. The methods used are questionaries and factors like friendliness, quality of advice, compliant redressal mechanism commission charged .This study helps to explore if there is a significant difference in the preference of attributes of a financial advisor based on the demographics of the respondents .the findings of this study brought out that the friendliness of the financial advisor and the quality of advice provided by them are preferred attributes determining the choice of a financial advisor In conclusion of this study it showed friendliness and the quality of advice are the attributes for selecting a financial advisor. Along with this, the preference for the attributes friendliness and quality of advice were also found to vary according to the age as well as the marital status of the respondents. Therefore, the financial

advisors along with adopting a more friendly and sensitive approach toward their women clients need to customize their services to suit the requirement of their clients.

M. Tauni, M. A. Majeed and S.S Mirza (2017) analyses Moderating influence of advisor personality on the association between financial advice and investor stock trading behaviour. The methods used are Questionnaires, Back-Translation method, Kaiser-Meyer-Olkin, Bartlett's test of sphericity, Exploratory Factor analysis and variables such as Extraversion ,Neuroticism, Openness ,Agreeableness, Conscientiousness .The authors found that financial advice Positively impacts investors' stock trading frequency. The authors additionally provide empirical data indicating that when an advisor's personality tends towards openness, conscientiousness, and agreeableness, financial guidance is more likely to improve trading frequency. The goal of this study was to determine whether a special psychological element, called adviser personality, may affect stock investors' trading behaviour when they decide to obtain financial advice from advisors. We came to the conclusion that investors' stock trading frequency will likely continue to increase with expert financial assistance. We have also taken measures to address concerns about possible endogeneity between trading behaviour and financial advice. We also draw the conclusion that the association between financial advice and investor trading conduct is influenced by advisor personality.

1.3 Research gap

Through the literature review we found that most of the studies are done on the same attributes that trust, sympathy, possession, credibility ,etc of stock broker. Most studies are surveys based on structured questionnaire. There is scarcity of studies that use detailed descriptive reviews of stock brokers. An examination of service quality of stock brokers based on open responses would help in getting authentic and substantial data about what clients think about their brokers. This study fills the gap by studying services of stock broker across India by employing text

data mining technique and capturing the sentiments from such data. as a main data for the study of sentiments. We use Orange software to evaluate and present sentiment analysis of people.

1.4 Objectives

- i. To study the sentiments of investors with respect to the services provided by stock brokers.
- ii. To identify major Strengths and Weaknesses of selected stock broking firms based on reviews by their clients.

1.5 Research Methodology

Sample design

For the purpose of this study of service quality of Indian brokers we used top 5 brokers like Zerodha, Angel one, Upstocks, Sharekhan, Kotak Securities as well as other brokers such as Icc Securities, Hdfc Securities, Geojit financial, Motilal Oswal, Finvasia, Fyers, Samco, Anand Rathi where the collected reviews of brokers were related to their service provided.

Sentiment analysis

The software used for doing sentiment analysis is Orange. This study evaluates service quality of brokers towards customers. The data used for this study is the reviews expressed by investors on popular product/service review website. We have obtained the review data from www.mouthshut.com. Around 500 reviews of top 5 brokers like Zerodha, Angel one, Upstocks, Sharekhan, Kotak Securities some other brokers such as Icc Securities, Hdfc Securities, Geojit financial, Motilal Oswal, Finvasia, Fyers, Samco, Anand Rathi.

Before understanding analysis, we have to first convert the data into corpus after that we have pre-process all the text data eliminate some unimportant things, characters so first filtered through transformation process by eliminating lowercase, html, accents and urls. Reviews were

tokenized by utilising word pronunciation to identify the repeated words mostly and sound words very well. Then we used normalization to make it useful through lemmagen lemmatizer. Filtering process was achieved by using stop words to eliminated uncommon words not related to broker and lexicon,numbers,postags.We used n-grams range helps to size the unigrams. and part of speech tagger by using Average perception .after pre-processing the text data we created a word cloud which is used to get main words in a diagrammatic manner for analysis .Afterward we connected sentiment analysis by selecting Vader then we connected to data table to remove Positive, Negative ,Neutral and Compound score to know the sentiment of people towards different services provided by brokers.

1.6 limitations of study

We have not been able to do k means clustering, topic modelling some advanced tools due to text data which would have made our analysis better to show results .The data had some reviews which were not related to brokers services and some people had both Positive as well Negative sentiments which made me hard in finding out the strength as well as Weakness in services provided.

Chapter II Analysis and Discussion

Analysing service quality of brokers through sentiment analysis

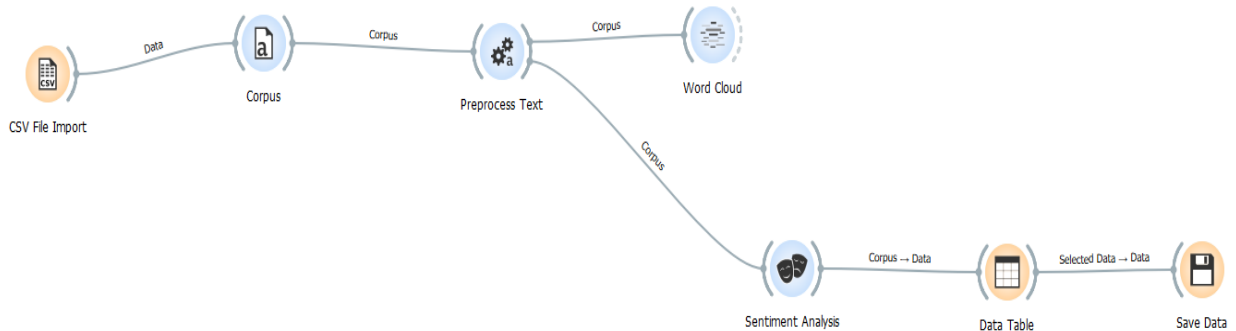


Fig 1 This figure represents the work flow to conduct sentiment analysis in Orange

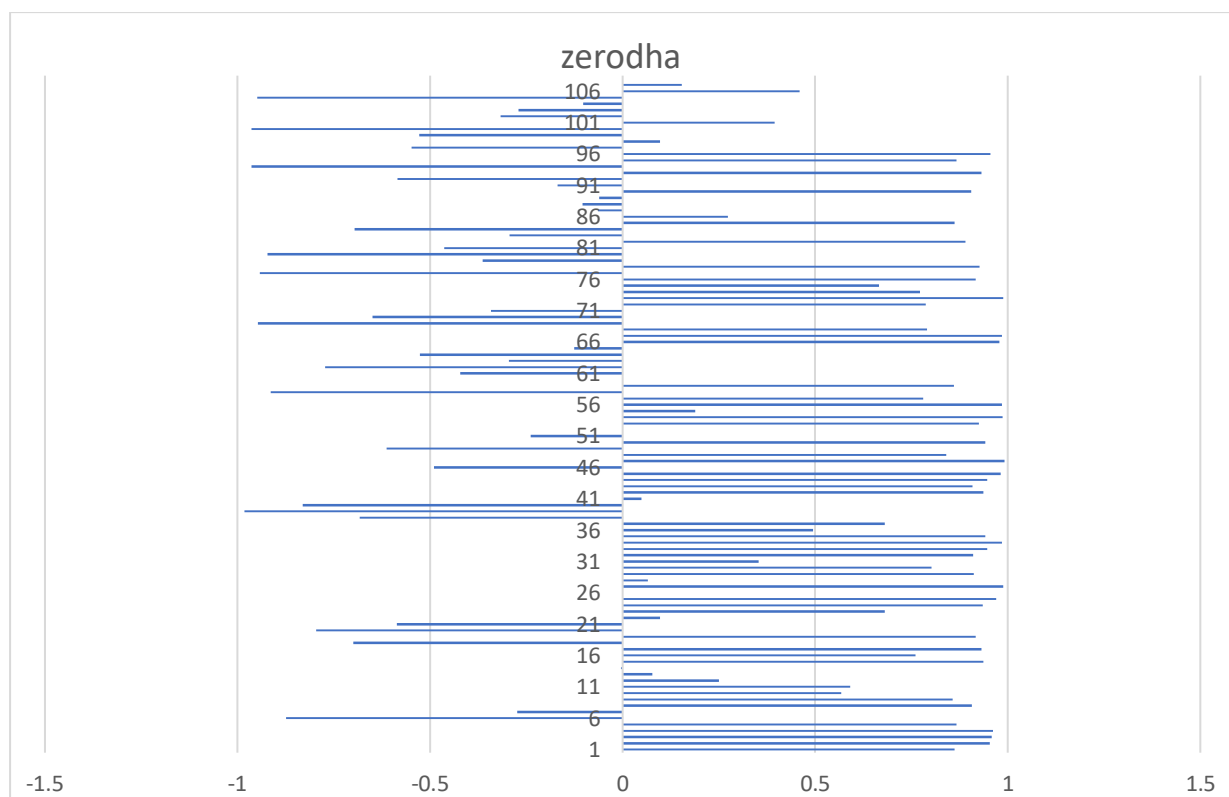
POSTIVE AND NEGATIVE SENTIMENTS

1 Zerodha

Positives (Strengths)	Negatives (Weakness)
1 It is safer to use without risk and the kite app is simple to use along with you can place different type of orders with no extra charges.	It charges one-time opening fees which is 300rs and annual maintenance charges is quite high which is more than the services provided by them.
2customer support is good and user interface is very friendly.	It does not provide better services related to ipo where it creates a lot of errors.
3It charges less brokerage that is 20 per order and account opening is vey fast with paperless which can be done in hour.	It creates a lot of technical glitches and takes some hidden charges which is unknown.

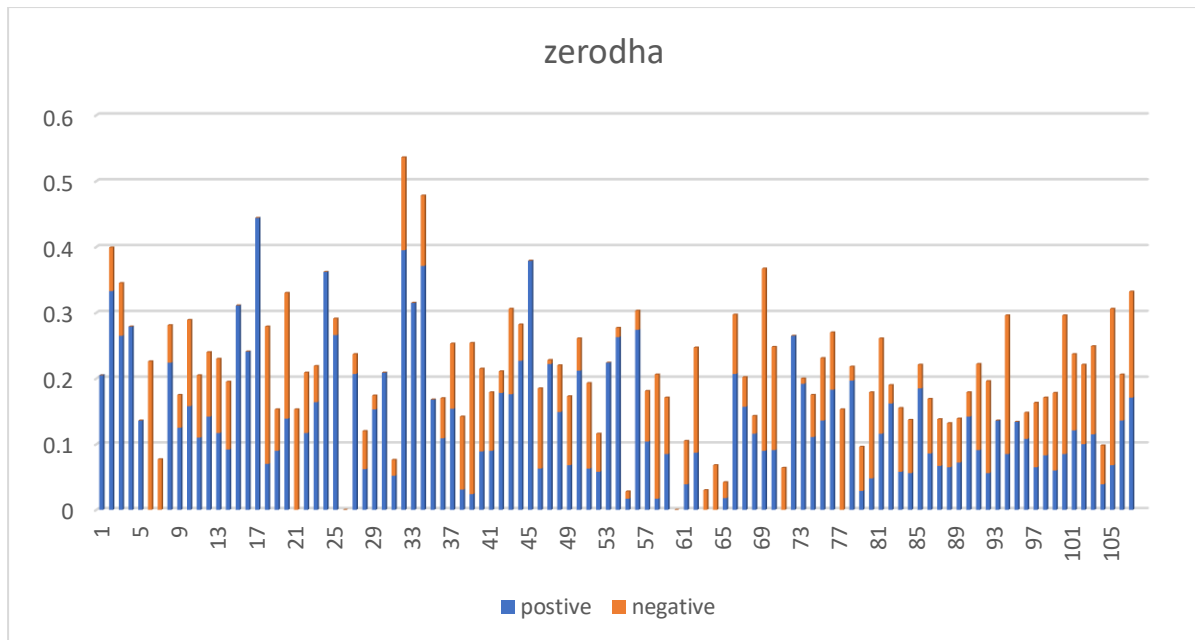
4The software used in well updated with technology and provides better tools for doing technical and fundamental analysis.	It provides poor customer services and has limited options in investment .
5It provides many good knowledge to learn and trade in stock market in varsity app.	It does provide less tools for technical analysis and the charts provided are also outdated.

Bar Chart Representation Of Sentiment Score



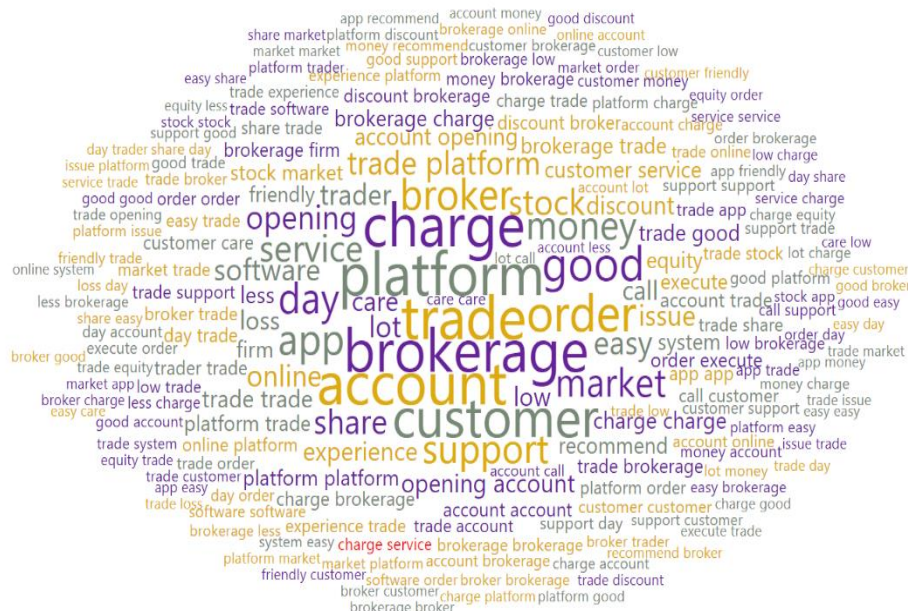
1.2 Compound score of Zerodha services

As per bar chart we can see there are most reviews related to services provided by Zerodha on a Positive sentiment on Average is (0.13) and Negative sentiment Average is (0.07) .



1.3 Positive and Negative sentiment of services provided by zerodha

This figure represents more weightage on Positive (0.13) as compared to Negative (0.07).sentiments related to the different services provided by zerodha.



1.4- Word Cloud Representation Of Text Data

The main word associations are

1. Low Brokerage
2. Customer Support
3. Account Opening
4. Order Execution
5. Friendly App
6. Platform
7. Software
8. Customer Care
9. Customer Loyalty
10. System

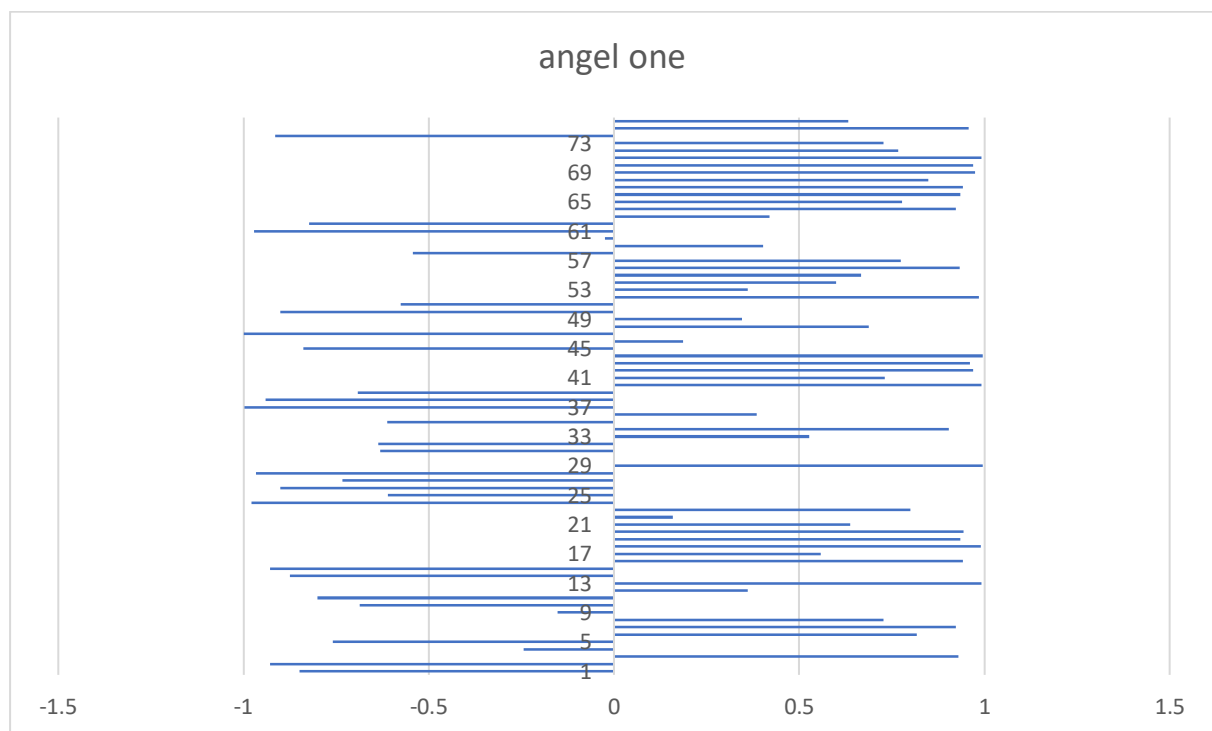
Positive And Negative Sentiments

2 Angel one

Positives (Strengths)	Negative(Weakness)
1It provides better services in terms ipo order placement.	It charges higher brokerages as well as annual maintenance charges.
2It provided good accuracy on stock recommendation and good customer support.	It provides poor customer care services and takes lot of time in solving queries.

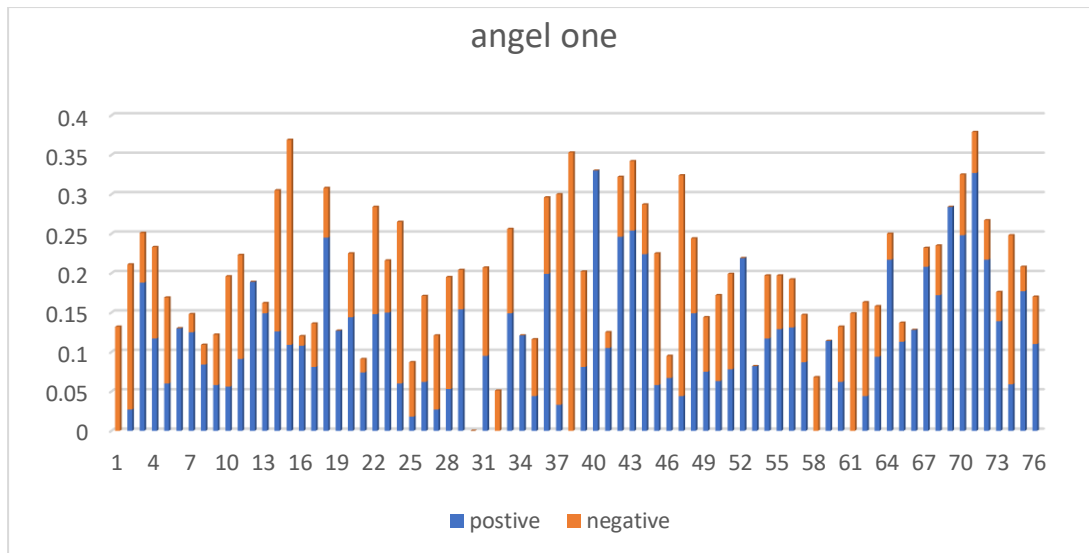
3 It has good software and helps to learn about stock market through videos.	It does not provide good recommendation specifically in derivatives segment.
4It provides lot of investment options and good opportunity for sub brokership.	The user interface is not very friendly and has done some fraudulent practices.
5it provides margin funding for delivery which is not provided by other brokers and it faces less technical glitches.	It has less tools for doing fundamental analysis and the charts provided for doing technical analysis is not good .

Bar Chart Representation Of Sentiment Score



2.1 Compound score of Angel one services

As per bar chart we can see there are most reviews related to services provided by Angel one on a Positive sentiment on Average is (0.11) and Negative sentiment Average is (0.08) .



2.2 Positive and Negative sentiment of services provided by angel one

This figure represents more weightage on Positive (0.11) as compared to Negative (0.08).sentiments related to the different services provided by angel one



2.3- Word Cloud Representation Of Text Data

The main word associations are

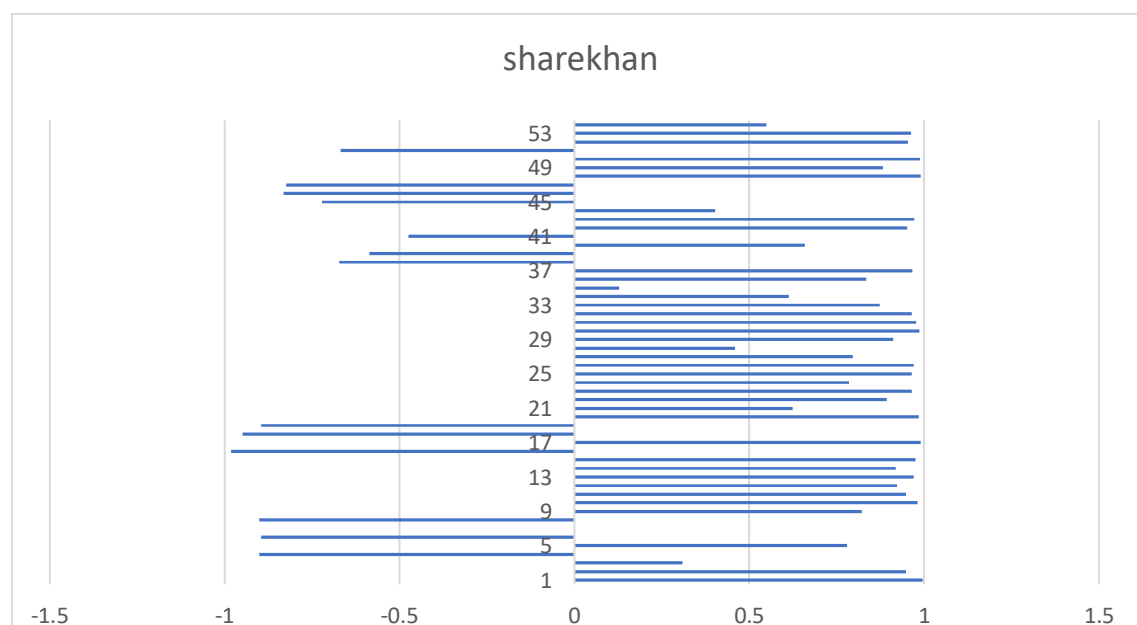
- | | | | |
|--------------------|---------------|------------|--------------------|
| 1.Brokerage | 3. Good App | 5.Platform | 7.Transaction Cost |
| 2.Customer Service | 4. Stock tips | 6.Software | 8.Experience |

Positive And Negative Sentiments

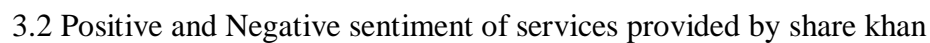
3 Share khan

Positive (Strengths)	Negative (Weakness)
1It provides good stock recommendations with their analysis and daily market updates.	It charges high annual maintenance charges and we cannot transfer the shares from one account to another easily.
2 the trade tiger platform is very fast and interface is user friendly and good portfolio management services.	The software provided is outdate in terms for doing technical analysis and it also creates lot of technical glitches.
3the customer care service is good.	It has limited options to invest into different products.
4sharekhan charges less commission on the stocks provided to invest and does not charge brokerage on loss trades .	It does not provide any videos and information to get to learn about stock market.

Bar Chart Representation Of Sentiment Score



As per bar chart we can see there are most reviews related to services provided by Share khan on a Positive sentiment on Average is (0.14) and Negative sentiment Average is (0.05) .



This figure represents more weightage on Positive (0.14) as compared to Negative (0.05) sentiments related to the different services provided by Share khan.



3.3- Word Cloud Representation Of Text Data

The main word associations are

1.Brokerage

2.Software

3.Friendly App

4.Portfolio Management

5.Customer Support

6.Platform

Positive And Negative Sentiments

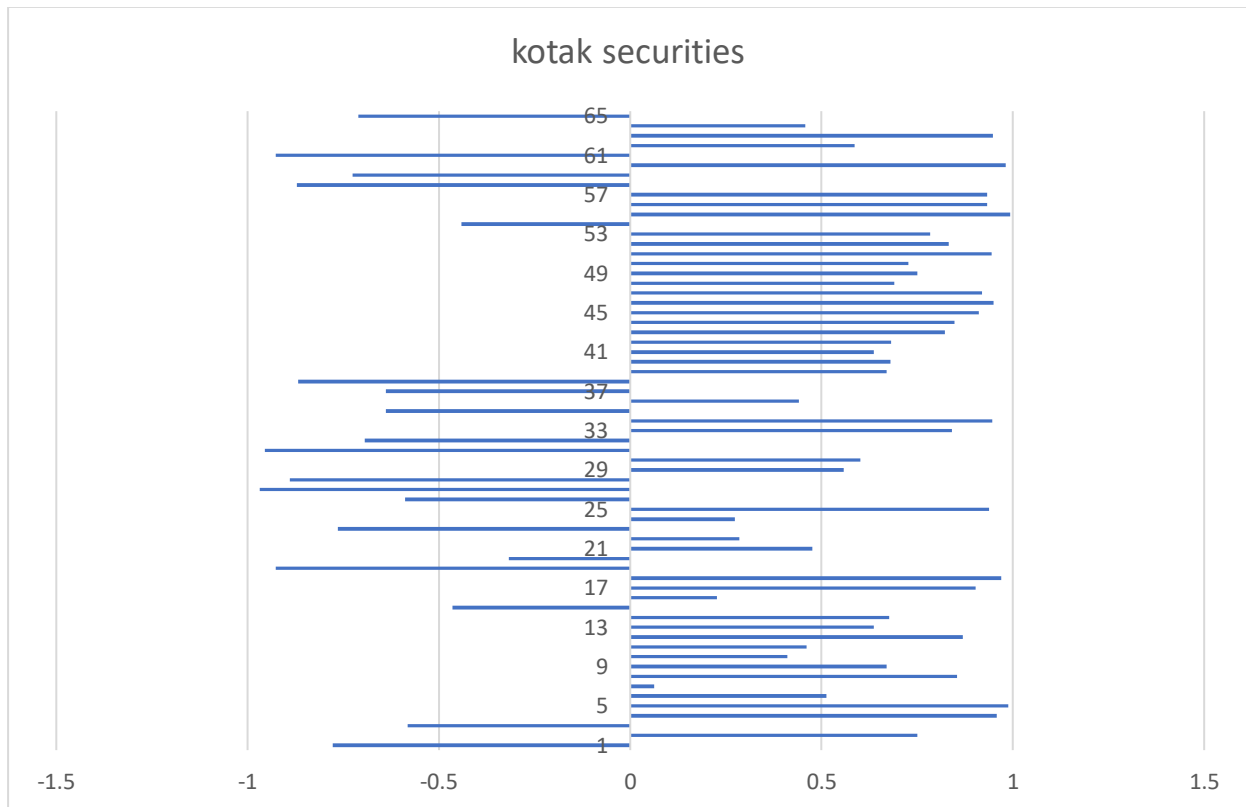
4 Kotak securities

Positive(Strengths)	Negative(Weakness)
1The software provided to analyse charts well updated.	The brokerage charges are high along with some hidden charges.
2The app is user friendly and fast.	The customer support services are bad and takes lot of time to solve queries.
3It has strong brand image as it is 3 rd top private bank and provides good stock recommendation with the help of expert's research.	It creates a lot of technical glitches.

4It provides good educational resources to learn about stock market.

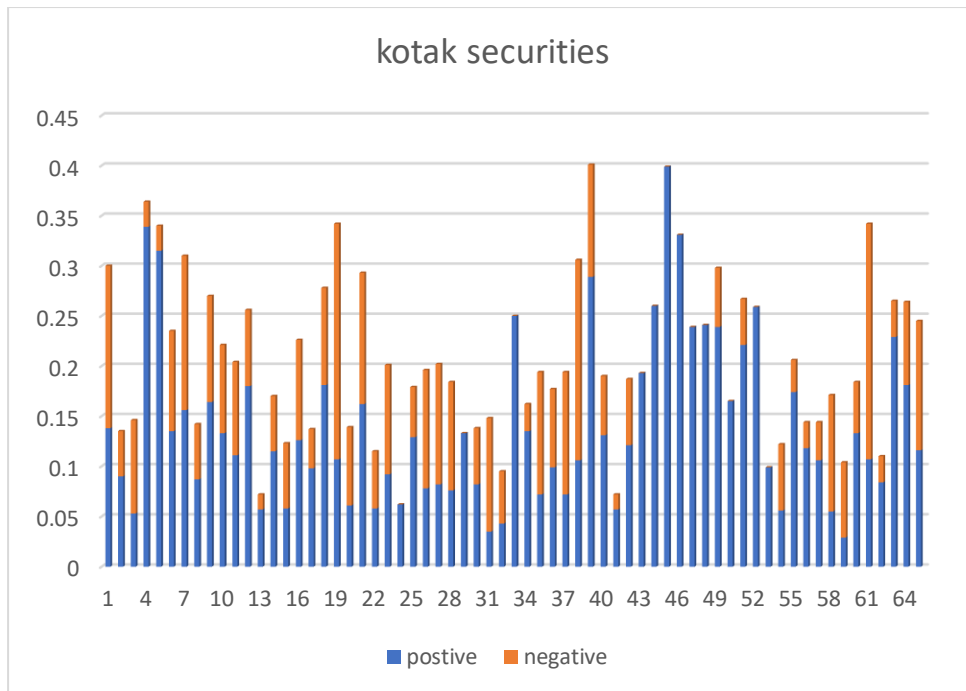
The account opening is very slow and provides less tools to do research.

Bar Chart Representation Of Sentiment Score



4.1 Compound score of Kotak securities services

As per bar chart we can see there are most reviews related to services provided by Kotak securities on a Positive sentiment on Average is (0.14) and Negative sentiment Average is (0.06) .



4.2 Positive and Negative sentiment of services provided by Kotak securities

This figure represents more weightage on Positive (0.14) as compared to Negative (0.06) sentiments related to the different services provided by Kotak securities.



4.3 Word Cloud Representation Of Text Data

The main word associations are

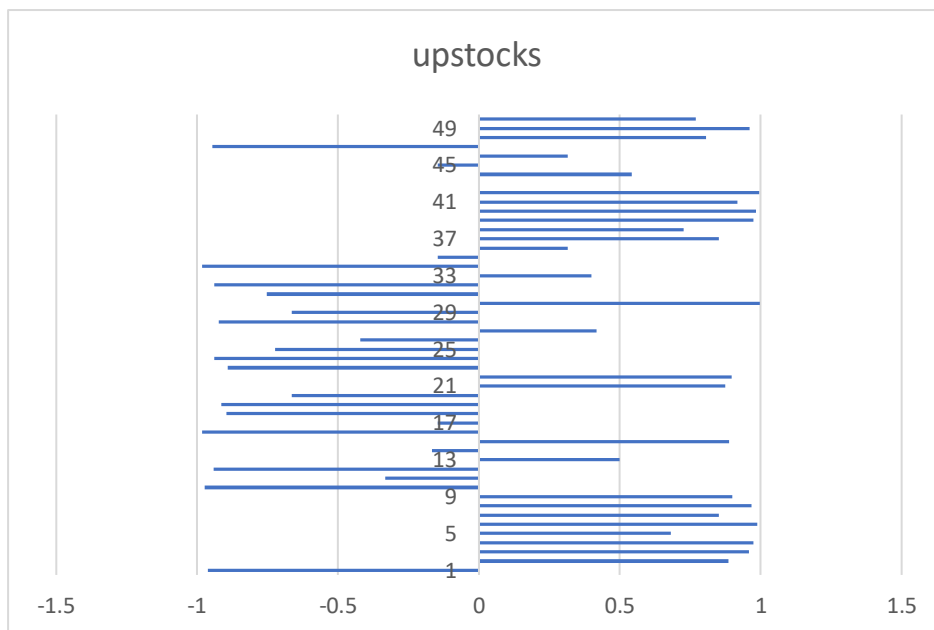
1. Customer Security
- 2.Portfolio management
- 3.Brokerage
- 4.Platform
- 5.Research Reports
- 6.Customer Support

Positive And Negative Sentiments

5 Upstocks

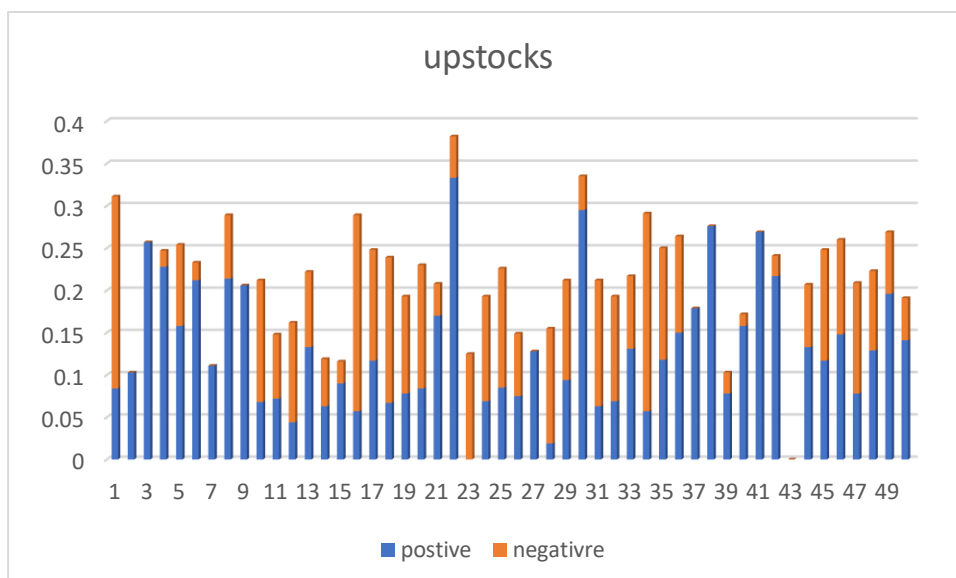
Positives(Strengths)	Negative(Weakness)
1The customer care services are good.	It creates a lot of technical glitches and the app performance is slow.
2The brokerage charges are low.	It charges high annual maintenance charges and takes some hidden charges.
3The user interface is friendly.	It provides less tools for analysis and does not solve customer problems quickly.
4 software provided is well updated with fast order execution.	It provided less educational resources to learn about stock market.

Bar Chart Representation Of Sentiment Score



5.1 Compound score of Upstocks services

As per bar chart we can see there are most reviews related to services provided by Upstocks on a Positive sentiment on Average is (0.12) and Negative sentiment Average is (0.08) .



5.2 Positive and Negative sentiment of services provided by Upstocks

This figure represents more weightage on Positive (0.12) as compared to Negative (0.08) sentiments related to the different services provided by Upstocks.



5.3 Word Cloud Representation Of Text Data

The main word associations are

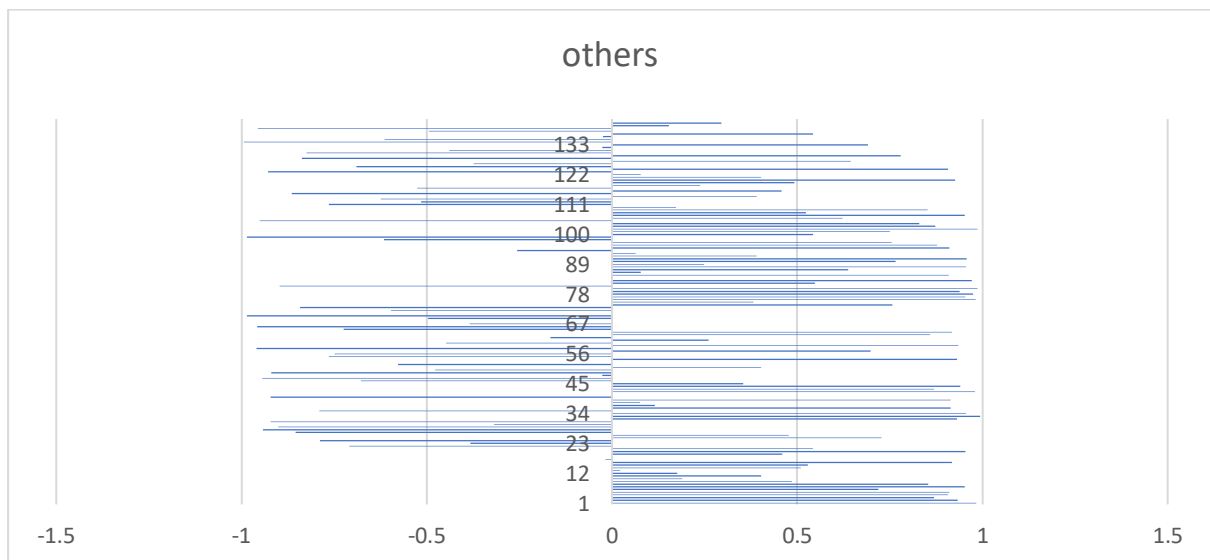
1. Technical Error
2. Customer Support
3. Brokerages
4. Software
5. Easy App
6. Refer and Earn

POSTIVE AND NEGATIVE SENTIMENTS

6 Other Brokers

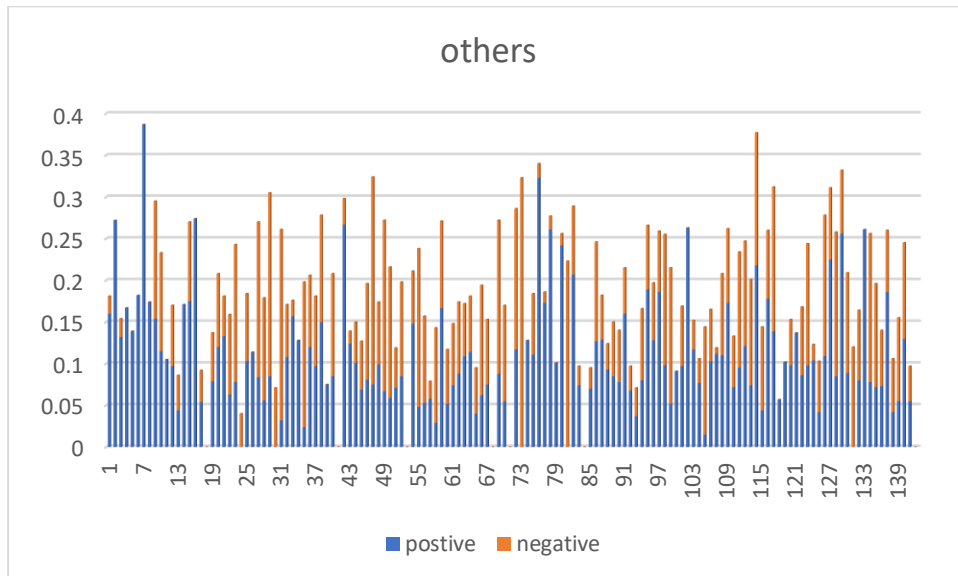
Positives (Strengths)	Negatives (Weakness)
1The brokerage charges are low.	The customer services are poor and takes some hidden charges.
2The software provided is well updated and fast with user friendly interface.	It creates and faces lot of technical glitches
3It provided good educational resources to get knowledge about stock market.	The recommendation stocks provide Negative returns and people in research are not experienced.

Bar Chart Representation Of Sentiment Score



6.1 Compound score of Other Brokers services

As per bar chart we can see there are most reviews related to services provided by Other Brokers on a Positive sentiment on Average is (0.10) and Negative sentiment Average is (0.07) .



6.2 Positive and Negative sentiment of services provided by Other Brokers

This figure represents more weightage on Positive (0.10) as compared to Negative (0.07) sentiments related to the different services provided by Other Brokers.



6.3- WORD CLOUD REPRESENTATION OF TEXT DATA

The main word associations are

1.Brokerage

2.Recommendation stocks

3.Expreience

4.Customer Care

5.Security

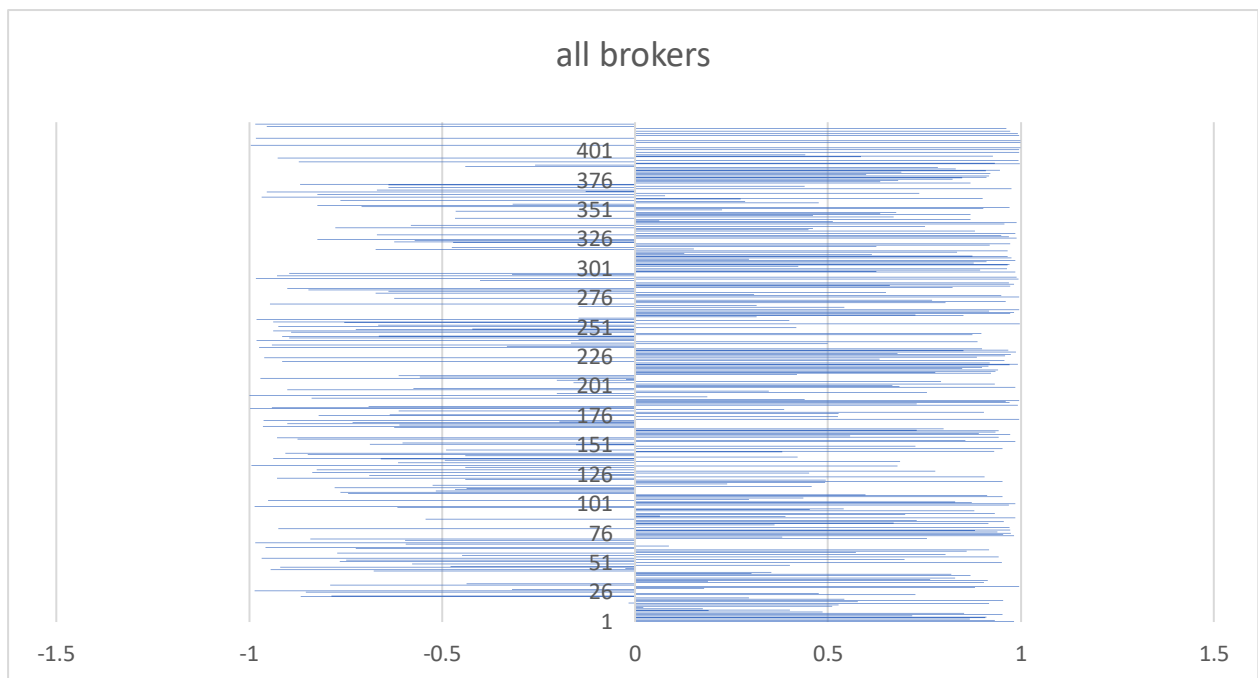
6.App

Positive And Negative Sentiments

7 all brokers

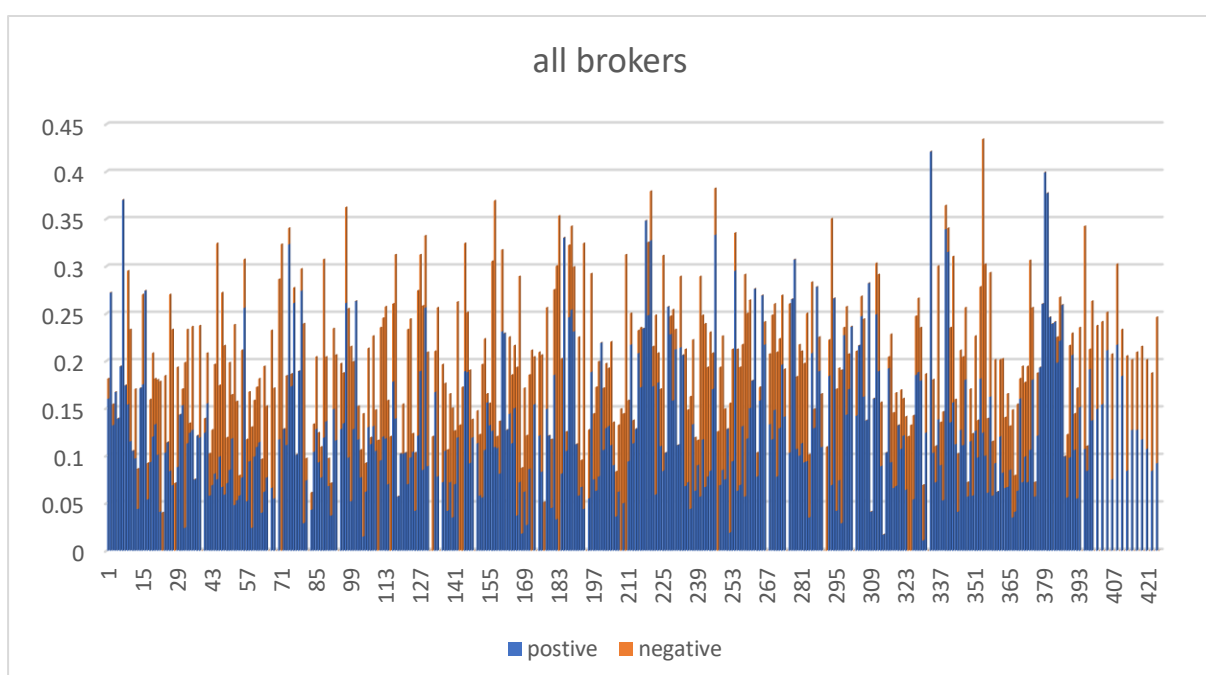
Positives (Strengths)	Negative(Weakness)
1The user interface is good with fast order execution.	It faces lot of technical glitches and takes many hidden charges.
2 The software is well updated with technology and provided good tools for doing analysis for picking stocks.	It provides poor customer care services.
3The brokerage charges are low.	
4 It provides best stock tips with good performance and good educational resources to learn about stock market.	

Bar Chart Representation Of Sentiment Score



7.1 Compound score of all brokers services

As per bar chart we can see there are most reviews related to services provided by angel one on a Positive sentiment on Average is (0.11) and Negative sentiment Average is (0.07) .



This figure represents more weightage on Positive (0.11) as compared to Negative (0.07).sentiments related to the different services provided by all brokers.



1. Brokerage

2.App

3.Customer Care

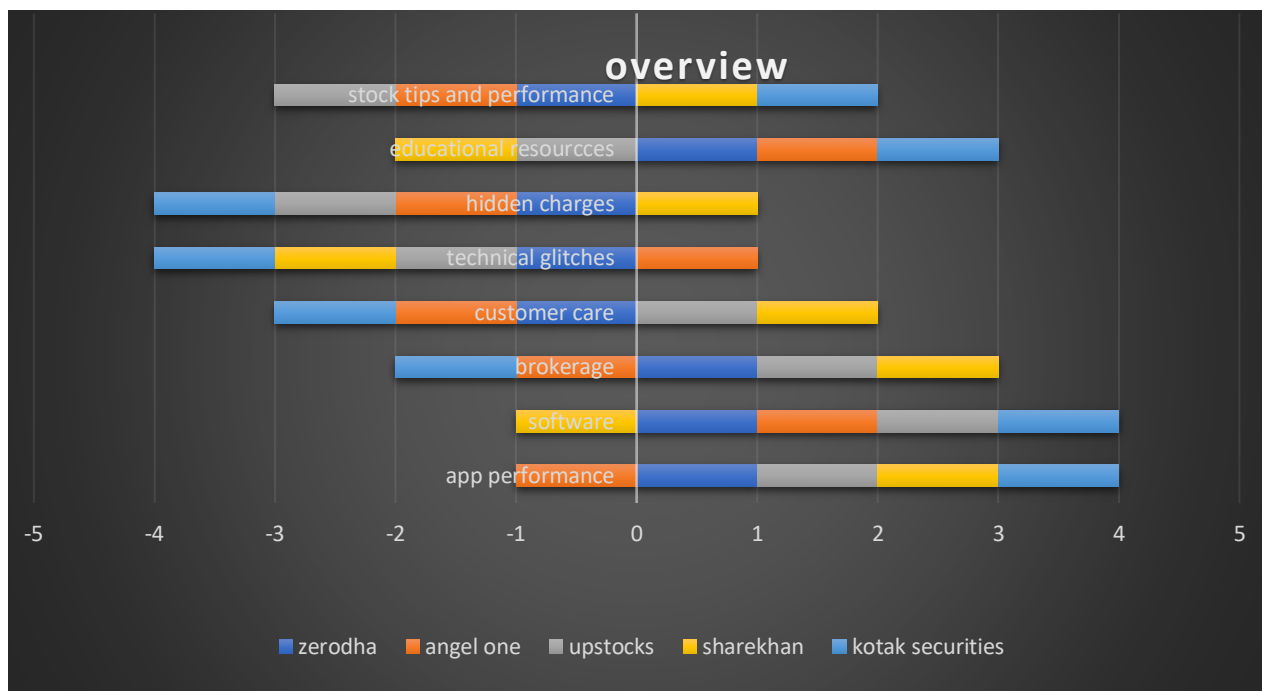
4. Platform

5.Account Opening

6. Research

7.Expreience

8. Software



1.App Performance (Positive sentiments)

Most brokers app performance is good and fast except Angel one.

2.Software (Positive sentiments)

Most brokers software is up to date with technology and good except Share khan.

3.Brokerages (Positive sentiments)

Most brokers charge less brokerage except Angel One and Kotak Securities.

4 .Customer care (Negative sentiments)

Most brokers provide bad customer care services and takes time to solve problems of customers except Upstocks and Share khan.

5. Technical Glitches (Negative sentiments)

Most brokers face lot of technical glitches except Angel one .

6. Hidden Charges

Most brokers charges lot of hidden charges except Share khan.

7. Educational Resources (Positive sentiments)

Most brokers provide good educational resources to learn about stock market except Upstocks and Share khan.

8. Stock tips and Performance (Positive sentiments)

Most brokers provide bad stock tips and are less performing except Zerodha and Upstocks.

.

Chapter III Findings and Conclusion

3.1 Findings

I Zerodha

i The Positives sentiments as per the reviews for low brokerage, good customer support, good educational resources, security, friendly user interface and Negatives are many technical glitches, hidden charges, less options of investment, bad customer services ,outdated tools for doing technical analysis ,ipo order placement.

ii As per the Compound score we found Positive (0.13) sentiments outweigh Negative (0.07) sentiments and through word cloud the words are low brokerage, customer support ,account opening ,order execution .friendly app ,platform, software, customer care, customer loyalty, system.

II Angel one

i The Positives sentiments as per the reviews for ipo order placement, good stock recommendation, lot of investment options, less technical glitches, educational resources. Better Customer support ,software, margin funding and Negative sentiments are high brokerage ,high annual maintenance charges ,time consuming for solving queries, bad recommendation in stock as well as index derivatives, bad user interface and less tool for analysis.

ii As per the Compound score we found Positive (0.11) sentiments outweigh Negative (0.08) sentiments and through word cloud the words are brokerage, good app, customer service ,stock tips, platform , transaction cost, software ,experience.

III Share khan

i The Positives sentiments as per the reviews for good stock recommendation, less commission, no brokerage on loss trades, customer care services, friendly user interface and Negative

sentiments are high annual maintenance charges, not able to transfer shares, lot of technical glitches, slow Software, limited options for investment ,less educational resources to learn about stock market .

ii As per the Compound score we found Positive (0.14) sentiments outweigh Negative (0.05) sentiments and through word cloud the words are brokerage, software ,friendly app .Portfolio management, customer support , platform .

IV Kotak Securities

i The Positives sentiments as per the reviews for software, strong brand image, good educational resources, user friendly app ,good stock recommendation and Negative sentiments are high brokerage charges, lot of technical glitches, slow account opening ,less tools for research, hidden charges ,takes lot of time solve queries.

ii As per the Compound score we found Positive (0.14) sentiments outweigh Negative (0.06) sentiments and through word cloud the words are customer security ,portfolio management ,research reports ,brokerage, customer support, platform.

V Upstocks

i The Positives sentiments as per the reviews for low brokerage, good customer care, friendly user interface , good software and Negative sentiments are lot of technical glitches, slow app performance, hidden charges, high annual maintenance charges, takes time solve customer queries ,less educational resources to learn about stock market , less tools for doing analysis.

ii As per the Compound score, we found Positive (0.12) sentiments outweigh Negative (0.08) sentiments and through word cloud the words are technical error, customer support, brokerages, software, easy app, refer and earn.

VI Other Brokers

i The Positives sentiments as per the reviews low Brokerage, good Software, better educational resources to learn about stock market and Negatives are bad stocks recommendation ,lot of technical glitches ,bad customer care services.

ii As per the Compound score we found Positive (0.10) sentiments outweigh Negative (0.07) sentiments and through word cloud the words are brokerage, recommendation stocks ,customer care ,security ,experience ,app.

VII All brokers

i The Positive sentiment as per the reviews for low brokerage, good software, good educational resources to learn about stock market , good stock recommendations and Negatives are lot of technical glitches, bad customer care services, hidden charges.

ii As per as per the Compound score we found Positive (0.11) sentiments outweigh Negative (0.07) sentiments and through word cloud the words are brokerage , app. customer care ,platform, account opening, experience, research, experience, software.

3.2Conclusion

As per the study we can conclude that most of the brokers charges less brokerage, good software which is upto date with technology ,user friendly interface and good educational resources to learn about stock market .most of the brokers provide poor customer care which takes a lot of time to solve a problem, also it faces many technical glitches in app which causes losses .Some people same Positive and Negative views related to brokers like in the case of providing stock tips which provides both Positive as well as Negative returns and less tools for doing analysis. Investors have mostly Positive sentiment related to brokers towards the different services provided by them.

3.3References

- Taunia, M. Z., Majeed, M. A., Mirza, S. S., Yousaf, S., and Jebran, K. (2018). Moderating influence of advisor personality on the association between financial advice and investor stock trading behaviour. *International Journal of Bank Marketing*, 36(5), 947–968. <https://doi.org/10.1108/IJBM-10-2016-0149>
- Bafna, D. (2018). *Impact of Service Quality of Stock Trading Brokerage Firms*. 04(03), 83–88.
- Kaur, J. (2023). Impact of stockbrokers' services on the trust and confidence of retail equity investors: an ordinal approach. *International Journal of Law and Management*, 65(1), 20–40. <https://doi.org/10.1108/IJLMA-03-2022-0065>
- Kaur M, Vohra T. Factors influencing the choice of financial advisor by women stock investors in Punjab An empirical study. Published online 2017. doi:10.1108/IJLMA-09-2015-0051
- Yik-Chee, L., Meredith, G. G., and Marchant, T. (2010). Singapore stock broking service quality: Fifteen percent gap. *Journal of Services Marketing*, 24(4), 305–313. <https://doi.org/10.1108/08876041011053015>
- Schrader, U. (2006). Ignorant advice - Customer advisory service for ethical investment funds. *Business Strategy and the Environment*, 15(3), 200–214. <https://doi.org/10.1002/bse.525>
- Murhadi, T., and Purnamasari, D. (2020). ANALYSIS OF INVESTOR LOYALTY ON STOCK BROKERAGE COMPANIES: EMPIRICAL EVIDENCE IN INDIVIDUAL STOCK INVESTORS IN ACEH PROVINCE. 263–274.

Studies, M., Ahamed, S., and Lecturer, S. (n.d.). *Service quality of stockbrokers in Bangladesh*. March 2011, 46–56.

Ramsaran, R. R., and Oogarah-hanuman, V. (n.d.). *Examining the Relationship between Market Orientation , Service Quality and Business Performance – The case of stockbrokers in Mauritius Rooma Roshnee Ramsaran-Fowdar *,. May 2015*.

Lin, X., and Wei, B. (1999). Service quality dimensions of securities brokerage firms: What customers consider as important. *Journal of Professional Services Marketing*, 20(1), 135–146. https://doi.org/10.1300/J090v20n01_10

Chan et al (n.d.).(2000)Selecting a broker or a brokerage firm : Segmentation of investors in Hong Kong stock market