Analyzing The Potential of E- Broking Vis-À-Vis Preferences Of The Investors In Choosing A Brokerage Firm- A Study In Hyderabad

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INTRODUCTION

The equity broking industry in India has several unique features. It is more than a century old, dynamic and forward looking, well conversant, highly innovative and adaptable. While regulation and reforms have made major improvements in the quality of the equity markets in India, its rapid growth and development are largely due to strong and efficient market intermediation. The robustness of the Indian markets today is attributable to a healthy blend of the quality of market structure and efficient intermediation. Even as several countries are instituting procedures to commence equity derivative markets, India ranks amongst the top five countries globally in this segment, in less than five years of its introduction. This is an example of the proactive and progressive nature of the Indian brokerage industry. In the last decade, the Indian brokerage industry has undergone a dramatic transformation. From being made of close groups, the broking industry today is one of the most transparent and compliance oriented businesses. Long settlement cycles and large scale bad deliveries are a thing of the past with the advent of T+2 settlement cycle and dematerialization. Large and fixed commissions have been replaced by wafer thin margins, with competition driving down the brokerage fee, in some cases, to a few basis points.

There have also been major changes in the way business is conducted. The scope of services have enhanced from being equity products to a wide range of financial services. Investor protection has assumed significance, and so has providing them with education and awareness. Greater need for capitalization has induced several firms to access the capital market; foreign firms are showing increasing interest in taking equity stakes in domestic broking firms.
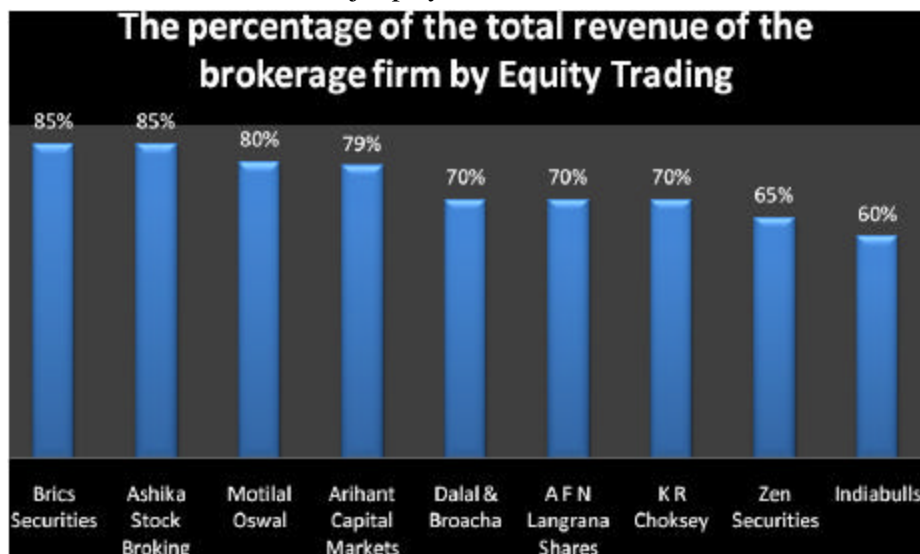
MAJOR DEVELOPMENTS IN EQUITY BROKERAGE INDUSTRY IN INDIA

1. Corporate memberships	6. Specialized services/niche broking
2. Wider product offerings	7. Online broking
3. Greater reliance on research	8. Compliance oriented
4. Accessing equity capital markets	9. Focus on training and skill sets
5. Foreign collaborations and joint ventures	10. From owners to traders

SHARE OF LEADING BROKERAGE FIRMS - INDIA

Here is a segment-wise breakup of India's leading equity brokerage houses. The revenue streams of equity broking firms are undergoing changes, against the background of growing business opportunities and diversified financial services. The major sources of revenue from major players are tabulated below:

Figure 1

The percentage of the total revenue of the brokerage firm by Equity Trading

Brics Securities	Ashika Stock Broking	Motilal Oswal	Arihant Capital Markets	Dalal & Broacha	A F N Langrana Shares	K R Choksey	Zen Securities	Indiabulls
85%	85%	80%	79%	70%	70%	70%	65%	60%

Source: http://india.dalalstreet.biz/earningsnews/2008_02_01_Business.html

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ONLINE TRADING: AN OVERVIEW

E-broking or online trading refers to the act of placing buy/sell orders for financial securities and/or currencies with the use of a brokerage's internet-based proprietary trading platforms. The use of online trading increased dramatically in the mid- to-late-'90s with the introduction of affordable high-speed computers and internet connections[2]. Stocks, bonds, options, futures and currencies can all be traded online. The following figure shows how the online trading works in a very simple manner. In this, the seller places the sell order to sell the shares and buyer places the buy order to purchase the shares. The orders can be placed at Market Prices or Limit Price (less than or more than the entered price if achieved, the order will be executed). Trading is done when the prices of buyer and seller match.

The use of online trades has increased the number of discount brokerages because internet trading allows many brokers to further cut costs and part of the savings can be passed on to customers in the form of lower commissions. Also, there is improvement in the speed at which transactions can be executed and settled, because there is no need for paper-based documents to be copied, filed and entered into an electronic format.

Table 1 : Brokerage firms in Hyderabad:

1. Indiabulls Securities Ltd.	6. Reliance Money	11. Karvy
2. India Infoline	7. Way2Wealth	12. Unicon Stock Broking
3. Sharekhan	8. Anagram Finance	13. Angel Broking
4. Kotak Securities	9. Motilal Oswal	14. Alankit House
5. ICICI Direct	10. Anand Rathi Securities	15. Geojit Securities

Most of the companies offer both online and offline trading. However, Way2Wealth and Anagram stress on offline trading due to their technical ineptness.

OBJECTIVES OF THE STUDY

The main objectives of the study are to:
1. Determine the potential size of e-broking services' market in Hyderabad.
2. Find out the investors' preferences for choosing a brokerage firm.

METHODOLOGY

Data Collection

Primary Sources comprise of Observations and Questionnaires. Two questionnaires were developed: First, consisted of six questions, that is used to determine the potential of e-broking or online trading in Hyderabad city. Second consisted of 29 questions, which helped to find the weightage of the factors influencing the investors' behavior about choosing a brokerage firm.

Questionnaire I and II was administered only in the Hyderabad city.

Secondary Sources include the data collected from company sales database, Internet, Journals, and E-broking sites etc. Analysis of secondary data will also be done to find out the variables that help the investors' behavior towards choosing a brokerage firm for internet trading or E-broking.

Sampling Technique: Both probability and Non-probability methods are used.

Stratified Sampling: The population of Hyderabad is stratified or arranged into grades in order to find the maximum internet users, which are the basis and target market of this project.

Judgment Sampling: After stratifying the population, Banjara Hills and Hi-tech city area is taken as **Category A,** where maximum Internet users are likely to be found; Begumpet and Karkhana (Vikrampuri) areas as **Category B;** and Ranigunj and Lalaguda (North and South) as **Category C,** where number of Internet users are likely to be lesser.

Quota sampling: Here, the population is first segmented into mutually exclusive sub-groups, just as in stratified sampling. The main part of this sampling is the interviewer who might be tempted to interview those people in the street who look most helpful. These samples may be biased because not everyone gets a chance of selection. This non-random element can be the weakness but this sampling is useful because the time was limited for the project.

Snow ball Sampling: Here, the interviewer used the references given by the respondents.

Sample Size: The research will be based on two types of investors:
1) **Existing investors** who use offline method of investing into the stock. Whether this population can also use the online trading services offered by the brokerage firm is found.
2) **Potential investors** who can use the online trading services: The share of the prospective investors who

can opt for online trading method when they actually start investing into the stock market is found.

   3) **Current and prospective investors:** 350, which includes 200 for questionnaire I and 150 for questionnaire II

Statistical Techniques

Descriptive statistics are used to summarize the data numerically and graphically to describe the sample. It also helped in graphical summarizations of sample population including various kinds of charts and graphs.

Proposed Research Instrument: Questionnaire survey and casual interview.

FINDINGS OF THE STUDY

Variables collected for the questionnaire

By casual interviews with the investors, relationship managers of the brokerage firms and working on the secondary data, 27 variables are identified that might affect the buying decision of an investor regarding choosing a brokerage firm. These 27 variables are based on the facilities provided by the different brokerage firms, expectations of investors from a brokerage firm, services provided by the relationship managers, market competitiveness etc. The following are the collected variables affecting the preference criteria for an investor about choosing a brokerage firm:

Table 2

|	
1. Proximity of the brokerage firm.	16. Pleasant interaction with bank employees.
2. Presence of the brokerage firm in other cities.	17. Electronic transfer facility from bank account to trading account.
3. How often you use the services of a brokerage firm.	18. Detailed summary of account facility.
4. Reliability of the tips/recommendations/SMS/ research reports provided by the firm.	19. Portfolio management services.
5. Trading sessions by the experts.	20. Minimum balance criteria.
6. Ease of opening account.	21. Annual Maintenance Charges (AMC).
7. Customized services by relationship manager.	22. Transfer via Credit Card facility.
8. Brokerage charges of the firm.	23. Ease of using the terminal software.
9. Call centre facility.	24. Interest rate and credit allowance provided by the firm for marginal trading.
10. Drop/Pick facility of Cheques at the door step.	25. Brand Image of brokerage firm.
11. User-friendly website.	26. How important do you think are promotions for brokerage firms?
12. Collection of outstation Cheques facility.	
13. Customized trading software.	27. Ambience and environment within the brokerage firm.
14. Online trading.	
15. Offline (via phone) trading.	

The questionnaire II is designed keeping the above variables in mind and using Likert Scale in order to find out the level of involvement of the variable in the decision criteria of an investor in choosing a brokerage firm.

ANALYSIS OF THE SURVEY FOR QUESTIONNAIRE I

The questionnaire I includes 6 questions asked from 200 respondents of different age groups (128 males and 72 females) and their responses are analyzed to find out the potential of e-broking in Hyderabad city. The responses are analyzed below:

Out of 200 respondents, 140 respondents are the targeted sample for the project and 60 are not the investors and were not even planning to invest in the stock markets (answered as 'No'). The data analyzed in a bar graph is given below:

Figure 2

Are you an existing investor in the stock market
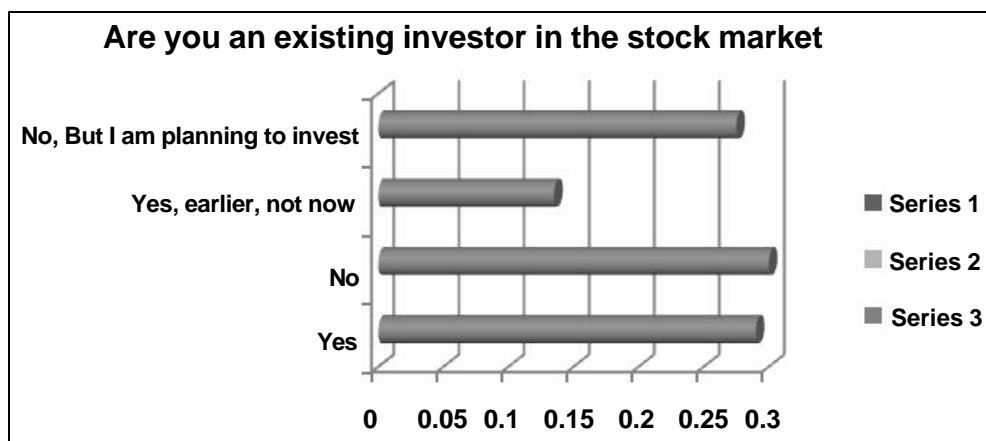
29% of the respondents said that they were existing investors in the stock markets while 27.5% of the respondents were planning to invest in the stock markets. Through this question, it is also found out that the percentage of inactive

investors is 13.5% who had their accounts but were not operating due to reasons like lack of time, poor services by brokerage firm, and previous loss in the share markets.

Out of 140 investors who were already having the investments or were planning to invest in the stock market, the portfolio value (in Rs.) is represented in the pie-chart, below:
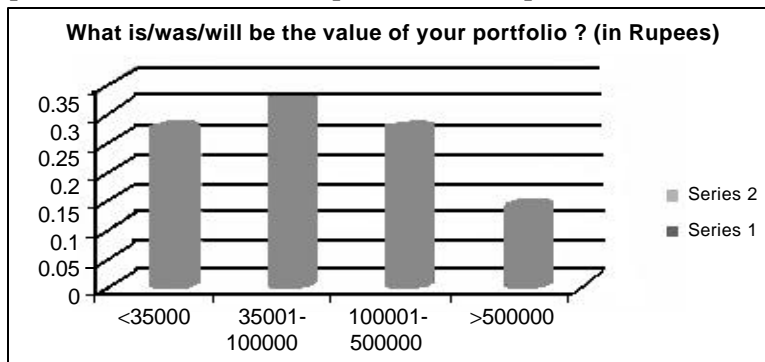

Figure 3

In numbers, the distribution is mentioned below:

Table 3

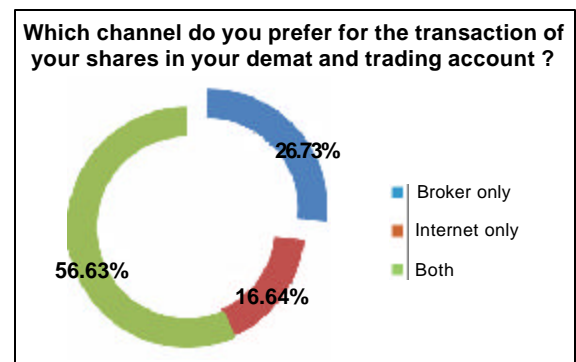| Portfolio Value (In Rs)	No. of respondents
Less than 35,000	38
35,001 - 1,00,000	45
1,00,001 - 5,00,000	38
More than 5,00,000	19

Figure 4

57.14% of the investors (existing or prospective) prefer internet as the only medium of transaction for the trading while 28.57% are not comfortable using internet as the medium of transaction due to different reasons. Along with this, 14.29% of the customers are comfortable in both the ways of trading i.e. online and offline.
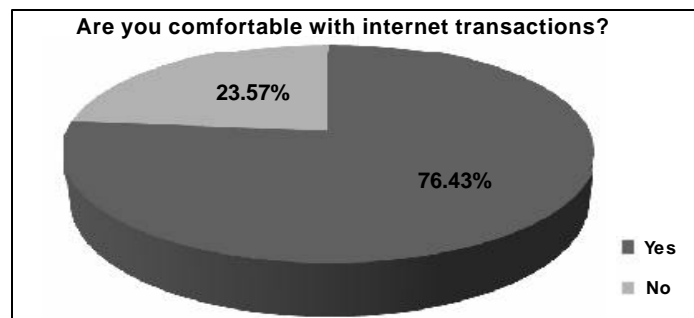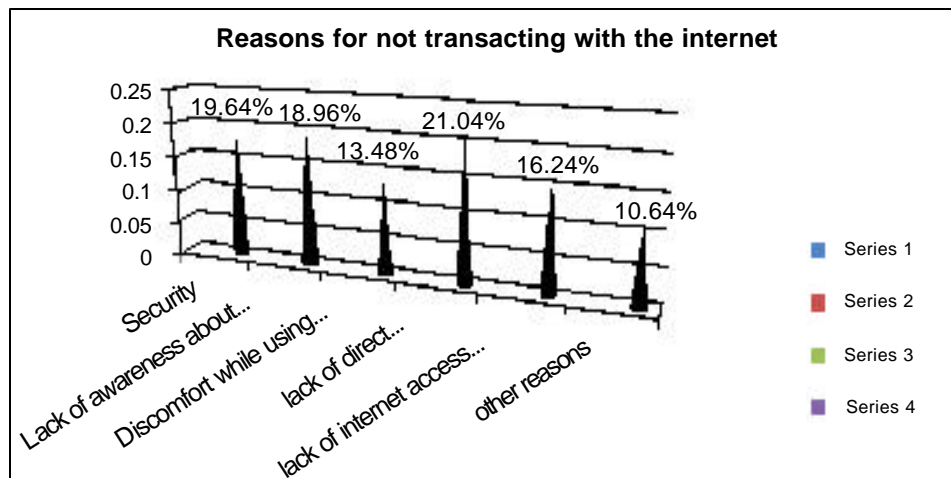

Figure 5

The main reason for using internet for the transactions is found to be easiness, greater privacy and flexibility to use and visibility of changes in the portfolio. 110 (76.43%) out of 140 respondents said that they were comfortable with internet transactions and remaining 30 (23.57%) said that they would not go for the internet transactions.

Figure 6

The main reasons for not transacting with the internet are security followed by lack of human being i.e. trust factor, Problem while using internet, less awareness levels and lack of access to the internet (represented in the pie chart below). Others included conflict with job timings and lack of comprehensive knowledge about the economy, industry and company scenarios. However, 56.38% of the respondents agreed to go for internet transactions if these problems were resolved.

ANALYSIS AND INFERENCE OF THE SURVEY FOR QUESTIONNAIRE II

A total of 200 questionnaires were sent to the people of different age groups across Hyderabad. This questionnaire is designed in such a way that it could find out the preferences of the investors about choosing a brokerage firm. The details of the responses are mentioned below:

Response Rate of the survey - 87.5 % (175 out of 200)

Error percentage - **14.28%** (25 out of 175)

The remaining 150 questionnaires are used for further calculation and analysis. The gender break-up of the sample is 109 males and 41 females.

FACTOR ANALYSIS

Initially the survey is conducted with 27 factors. The factor analysis is performed to identify the similar factors and reduce the interrelationships amongst the variables to a few numbers of clusters or factors.

Correlation matrix (Output 1) The determinant is listed at the bottom of the matrix. For this survey, its value is 1.72E-05 (which is 0.0000172) which is greater than the necessary value of 0.00001. Therefore, multi-co-linearity is not a problem for this data. To sum up, all questions in the survey correlate fairly well and none of the correlation coefficients are particularly large; therefore, we did not consider eliminating any questions at this stage.

KMO AND BARTLETT'S TEST

The following shows several very important parts of the output: the Kaiser-Meyer-Olkin measure of sampling adequacy and Bartlett's test of sphericity. A significant test tells us that the R-matrix is not an identity matrix; therefore, there are some relationships between the variables we hope to include in the analysis. For this data, Bartlett's test is highly significant ($p < 0.001$), and therefore factor analysis is appropriate.

Table 4

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.613
Bartlett's Test of Sphericity	Approx. Chi-Square	1531.791
	df	351
	Sig.	.000

a. Based on correlations

TOTAL VARIANCE EXPLAINED

SPSS **Output 2** lists the eigenvalues associated with each linear component (factor) before extraction, after extraction and after rotation. Before extraction, SPSS has identified 27 linear components within the data set (we know that there should be as many eigenvectors as there are variables and so there will be as many factors as variables). Rotation has the effect of optimizing the factor structure and one consequence for this data is that the relative importance of the eight factors is equalized. Before rotation, factor 1 accounted for considerably more variance than the remaining eight (18.965% compared to 10.164, 8.945, 7.768, 5.687, 5.232, 4.861, 4.334 and 3.922%), however after rotation it accounts for only 10.967% of variance (compared to 8.884, 7.094, 9.626, 7.230, 5.882, 7.653, 6.995 and 5.545% respectively).

COMMUNALITIES

SPSS **Output 3** shows the table of communalities before and after extraction. Principal component analysis works on the initial assumption that all variance is common; therefore, before extraction the communalities are all 1. The communalities in the column labeled **Extraction** reflect the common variance in the data structure. So, for example, we can say that 75.6% of the variance associated with question 1 is common or shared variance.

Note: Component matrix output also shows the component matrix before rotation. This matrix contains the loadings of each variable onto each factor. By default, SPSS displays all loadings. This matrix is not particularly important for interpretation.

At this stage, SPSS has extracted nine factors. Factor analysis is an exploratory tool and so it should be used to guide the researcher to make various decisions: we shouldn't leave the computer to make them. One important decision is the number of factors to extract.

SCREE PLOT
Scree plot, which is **Output 4,** can also be used. It is shown with arrow indicating the point of inflexion on the curve. This curve is difficult to interpret because the curve begins to tail off after nine factors having eigenvalues greater than one in the stable plateau. Therefore, we will be able to justify nine factors. As the sample is large i.e. 150, it is safe to assume Kaiser's criterion; however, we could rerun the analysis specifying that SPSS extracts only nine factors and compare the results.

FACTOR ROTATION
Following contains the same information as the component matrix in Output 4 except that it is calculated after rotation. All the total 27 variables have been reduced into 9 important factors.

Factor 1 - Augmented Facilities - Offline trading, Call centre facility, detailed summary of the account facility.

Factor 2 - Credit Facilities - Brokerage charges of the firm, transfer via credit card facility, interest rate and credit allowance, ease of using the trading software.

Factor 3 - Transaction Facilities - User-friendly website, Annual Maintenance Charges (AMC), collection of outstation cheques facility, customized trading software.

Factor 4 - Availability - Proximity of the brokerage firm, reliability of the recommendations/tips of the brokerage firm, presence of the brokerage firm in other cities.

Factor 5 - E-Commerce - Online trading, electronic transfer facility, Portfolio Management Services (PMS).

Factor 6 - Brand Image -Minimum balance criteria, brand image of brokerage firm.

Factor 7 - Ambience -Ambience of the brokerage firm, promotions of the brokerage firm.

Factor 8 - Operational Convenience - Trading sessions by experts, number of brokerage transactions.

Factor 9 - Personal Attention - Drop and pick facility of cheques, pleasant interaction with bank employees, and ease of opening an account.

Analysis of the Factors

Table 5

S.No.	FACTORS	Not Important	Slightly Important	Important	Very Important	Crucial	Total
1	Augmented facilities	8	29	65	39	9	150
2	Credit Facilities	6	21	70	52	1	150
3	Transaction Facilities	0	37	71	40	2	150
4	Availability	0	9	35	92	14	150
5	E-Commerce	0	14	40	86	10	150
6	Brand Image	3	15	76	51	5	150
7	Ambiene	3	21	69	53	4	150
8	Operational Convenience	1	38	87	24	0	150
9	Personal Attention	0	15	71	61	3	150

Note: Scores for individual factors are determined by taking the average of scores of the constituent variables.

Figure 7
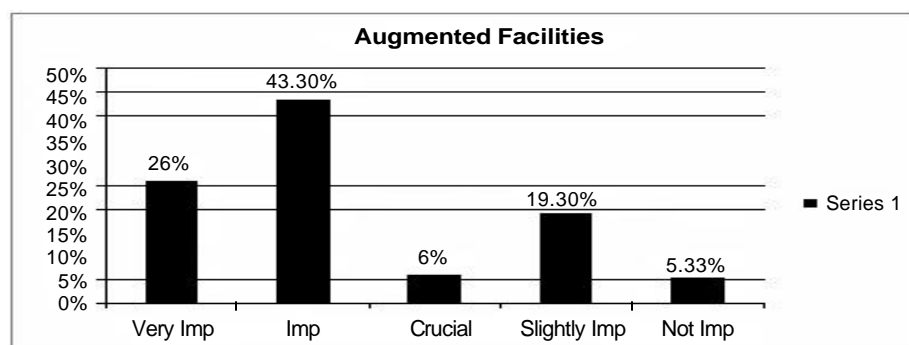
More than 75 % of the respondents feel that augmented facilities, which include offline trading, call centre facility and detailed summary of the account facilities, are important in choosing a brokerage firm.
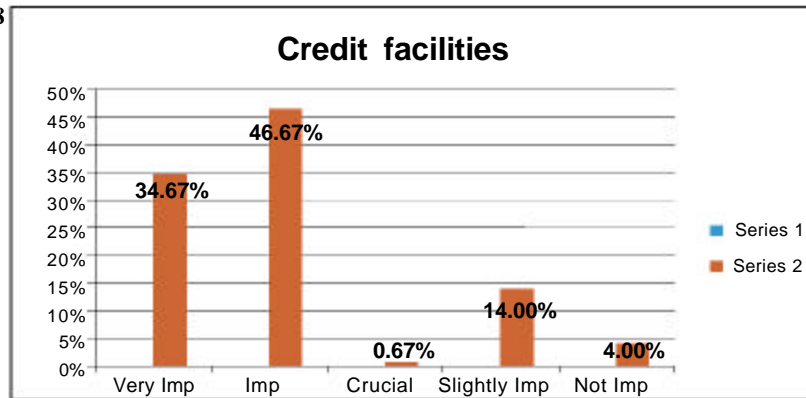
Figure 8

Credit facilities

82% of the respondents feel that the credit facilities provided by the brokerage firm that includes marginal trading, cash trading and the interest rate applied on the credit given by these brokerage firms play an important role in the choice of a brokerage firm. However, 18% feel that they are not an important factor which will determine choice of a brokerage firm.

Figure 9

Transaction Facilities
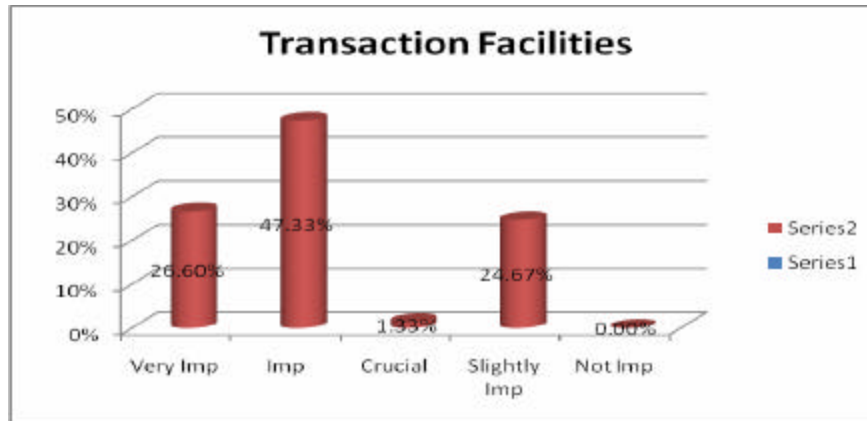
As expected, around 75 % respondents feel that transaction facilities play an important role. Transaction facilities include user-friendly website for online trading, Annual Maintenance Charges (AMC), collection of outstation cheques facility and customized trading software. With the help of customized trading software, online trading can be done in a faster and more reliable way. It is significant to note here that there was none who said that transaction facilities are not important.

Figure 10
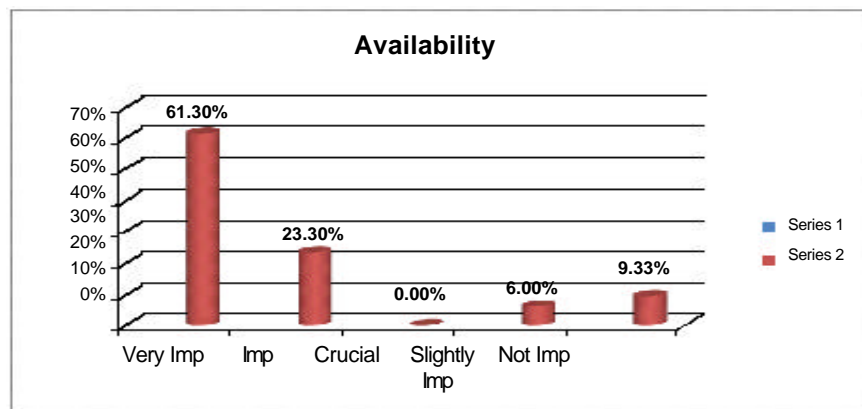
Availability

84 % of the respondents have made it clear that availability factor is important to them. It is the major criteria for the investors to park their money with any brokerage firm. The proximity of the brokerage firm, reliability of the tips and recommendations by the brokerage firm and presence of the brokerage firm in other cities so that they do not have any problem in relocating the account from one city to another.

Figure 11
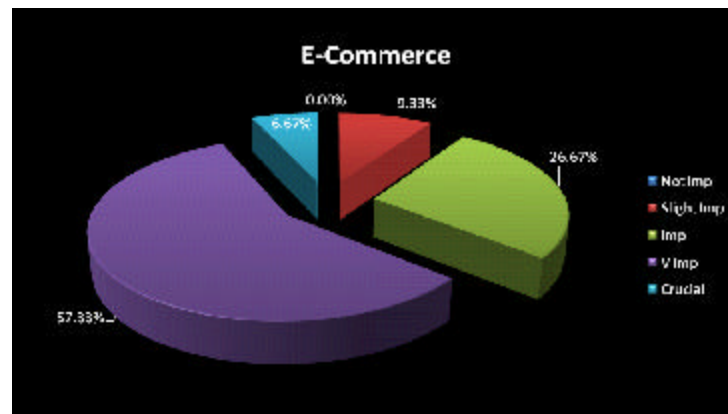
With the change in lifestyle and mindset of the people, it is no surprise that 91 % respondents rate e-commerce as an important factor. It includes three variables which are of utmost importance for any brokerage firm at this time and they are very much included to this project. These variables are online trading, electronic transfer facility, Portfolio Management Services (PMS).

Figure 12

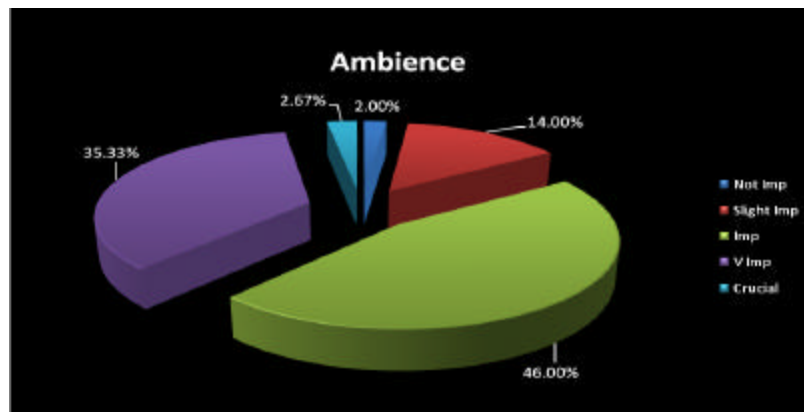Although 16 % of the respondents feel that Ambience is not so important, 84% are of the opinion that it plays an important role in determination and choice of a brokerage firm.

Here, ambience includes environment created in the firm itself and promotions done to create an aura about the brokerage firm. The ambience should spread positive waves so that investors can rely on them.

Figure 13
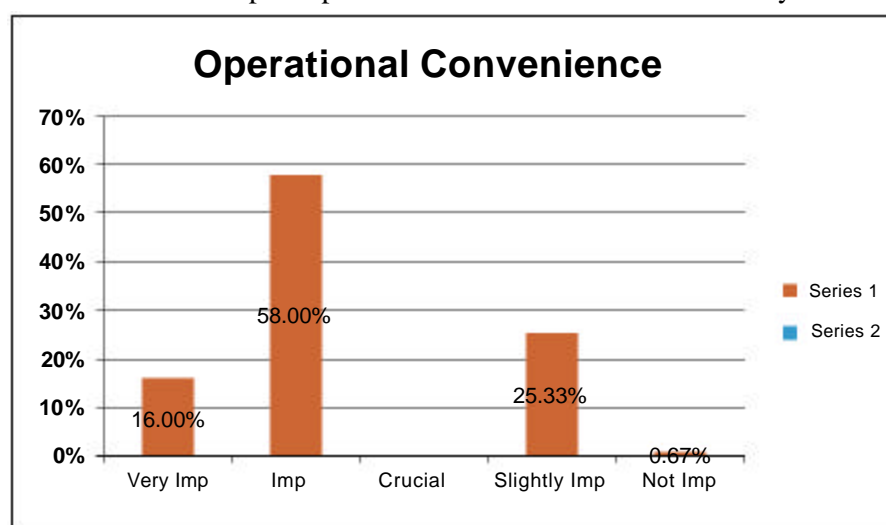
Operational Convenience plays an important role according to 74% respondents but none of them rate it as a crucial factor. This factor includes trading sessions by experts of the firm and number of brokerage transactions. 58% of the respondents said that the sessions provided by the firm are important to understand the contemporary market trends.

Figure 14

Personal Attention
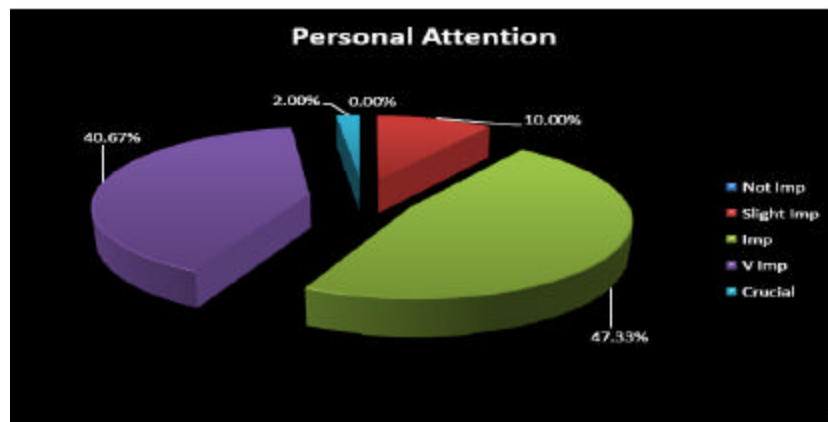
For 90% of the respondents, personal attention is important. It is also evident from the suggestions given in the questionnaires regarding pleasant interaction with the employees. This factor also includes drop and pick facility of cheques and ease of opening an account.

Figure 15
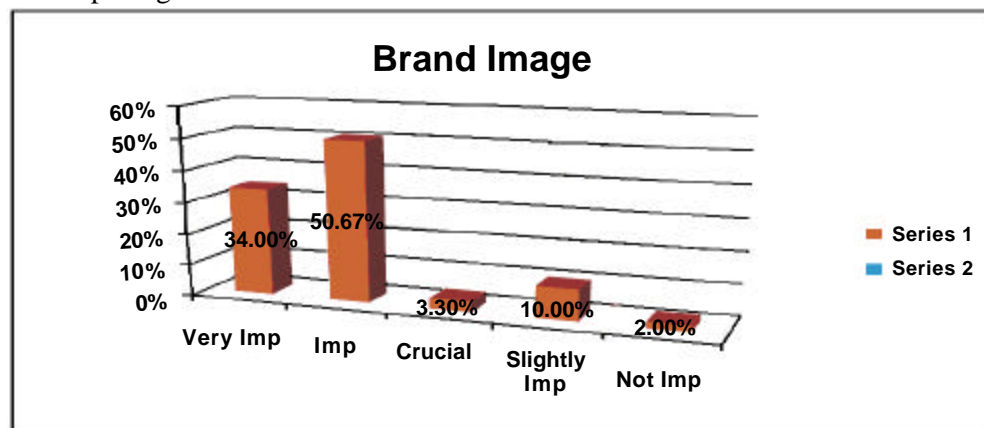
Brand Image

88% of the respondents take brand image as an important criterion for choosing a brokerage firm, which is very important for the big investors for their money to park into the safe hands. It also includes minimum balance criteria in the trading account for the small investors, who do not want their money to be just put in the trading account rather then being invested somewhere. By this, we can say that brand image as a factor serves both big and small investors.

REGRESSION ANALYSIS

The main purpose of the study is to analyze the factors affecting the choice of an investor in the selection of a brokerage firm. However, different brokerage firms provide different services. For example, Indiabulls Securities is known for its Portfolio Management Services (PMS) and Sharekhan is known for its presence amongst the retail investors. Hence, the customer tends to differentiate between the services provided by the different brokerage firms. Once the various services were identified, a regression analysis was performed to identify the influence and extent of dominance of these factors in determining the decision criteria. Based on the regression analysis, a relation has been established between the decision and decision criterions.

Choice of Brokerage Firm = 3.797 + 0.079 (Augmented Facilities) + 0.042 (Credit Facilities) + 0.158 (Transaction Facilities) + 0.256 (Availability) + 0.093 (E-Commerce) + 0.012 (Brand Image) + 0.303 (Ambience) - 0.116 (Operational Convenience) - 0.116 (Personal Attention)

From the above relationship, few points may be observed:

1. The sample size mostly consisted of people between the age group of 20 - 30 years; hence, the result is an indicator of the choice of the young working class people.

2. It may be observed that the decision to select a brokerage firm is not governed much by the core services and facilities like operational convenience and personal attention.

3. The sample group seems to prefer a brokerage firm which provides them more augmented facilities, credit facilities, E-Commerce, Ambience and above all, availability (i.e. proximity of brokerage firm or and reliability of tips and recommendations provided by the brokerage firm).

4. This is also an indicator of the changing lifestyle and mindset of the population.

5. This preference may also be substantiated by the fact that people prefer to use more of the online trading facilities rather than offline trading because of various reasons like increasing knowledge about the financial markets and self trading.

The model explains 28.8 % variation in the dependent variable. Though this statistic appears small, but the model used is quite significant otherwise as observed by looking at the significance level of the model which is close to 0.

The efficiency of the model can also be judged by observing the Normal P - P Plot of Regression Standardized Residual where the expected and observed values are almost coinciding with each other.

It is worth mentioning that the model thus established is free of Multi-co-linearity and Homoscedasticity problems. These may be observed from the VIF values obtained in the Coefficient Table and the Scatter Plot graph.

VIF values of each independent factor are 1 which indicates that the model does not suffer from Multi Co-linearity. Moreover, the tolerance values are also equal to 1 as tolerance is the reciprocal of the VIF values. The Scatter Plot Graph forms a cloud like shape denoting that there are no Homoscedasticity problems in the model.

CONCLUSION

There is a huge potential in online trading services. It is also manifested from the fact that 76.43% of the respondents of the survey in Hyderabad were comfortable with the internet transactions having varied portfolio values joining different age groups. Currently, the equity market trend is like-Cash me if you can. It simply means that most of the stocks are undervalued after the affects of US recession in Indian Stock Markets at this time and this is the time to buy the stocks. The company has the capacity to cater to all type of clients like HNI, retail, arbitrager, Internet, corporate, FIIs, NRI's and institutions etc. However, the company's primary focus is on its Portfolio Management Services for HNIs, FIIs etc and not in the retail segment, which holds immense growth prospects for the company. To cater to this segment, the company needs to understand the preferences of the investors for choosing a brokerage firm so that it can understand the investors' psyche in more appropriate manner and serve them in a better way.

RECOMMENDATIONS

On the basis of the project and understanding the trends of Indian brokerage industry, following recommendations have been made for brokerage companies:

Work on security issues

The companies should work on security issues regarding the online trading by installing secured, controlled and well-documented processes and thereby achieving full statutory compliances with regard to all the regulations prevalent at any point of time.

Increase Promotions

The company should also promote itself in such a way that it makes a widespread presence within the retail investors (Promotions are included in the Ambience Factor).

Increase number of branches

Branches in almost all parts of the country also help to boost business. Indiabulls Securities Ltd. ranks fifth having 475 branches across India. (SMC Global Securities Limited with 800 branches lead the table of brokerages with the largest number of network in India followed by Karvy Stock Broking Limited (550), India Infoline limited (540) and JRG Securities Limited (479) in the first four positions.) To continue being a part of the industry growth, the company should also take this part into consideration and work on increasing the branches and so increase the reach amongst the retail investors. Proximity being an important factor plays a very important role in choosing a brokerage firm for an investor (Availability Factor includes Proximity variable).

Improve employee/customer satisfaction

By the survey, it was found that Indiabulls Securities Ltd. is having a negative impression on the customers because the company sometimes fails to satisfy its employees. The company should work on this area because satisfied employees spread positivism in the population and improve brand image. The company should also maintain a Customer Satisfaction (C-SAT) team to continuously ensure the customer satisfaction level of the organization.

● Working on the factors analyzed

Financial strength and ethical integrity is required for the credibility of any organization in the financial field. Branding is an important aspect for business development; these can be achieved when all the 9 factors analyzed in the report are taken care of.

● Launch Mutual Funds

<p align="center">**OUTPUT 1 : Component Analysis**</p>

	Raw									Rescaled								
	Component									Component								
	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
13.Customized trading software	.759	-.063	.023	-.076	-.218	-.151	.178	.211	-.157	.731	-.061	.022	-.073	-.210	-.146	.172	.204	-.152
19.Portfolio management services	.624	.239	-.154	-.402	-.021	.210	.034	-.345	-.149	.606	.232	-.149	-.390	-.021	.203	.033	-.335	-.144
9.Call centre facility	.672	.324	-.651	-.066	-.204	.224	-.022	.365	-.035	.562	.270	-.544	-.055	-.171	.188	-.018	.305	-.029
15. Offline (via phone) trading	.589	.389	-.582	.115	-.126	-.136	.084	.068	-.179	.546	.361	-.540	.107	-.117	-.126	.078	.063	-.166
18. Detailed summary of account facility	.566	.374	-.189	-.375	.041	-.465	.092	-.288	.013	.513	.339	-.171	-.339	.037	-.421	.083	-.261	.012
14. Online trading	.478	.028	.411	.186	.008	.072	.412	-.114	-.032	.510	.030	.439	.198	.008	.077	.440	-.122	-.035
8. Brokerage charges of the firm	.552	-.552	-.089	-.093	.050	.520	-.165	-.209	-.111	.483	-.483	-.078	-.081	.044	.456	-.144	-.183	-.097
17. Electronic transfer facility from bank account to trading account	.405	.279	-.017	.130	.132	.221	.253	-.403	.016	.457	.314	-.019	.147	.149	.250	.286	-.455	.018
26.How important do you think promotions are for brokerage firms?	.412	-.007	.210	.106	.083	.313	-.367	-.109	.119	.419	-.007	.214	.108	.084	.318	-.374	-.111	.121
20. Minimum balance criteria	.439	-.880	.278	-.659	.104	-.054	.140	.056	-.012	.331	-.662	.210	-.496	.078	-.040	.106	.043	-.009
23. Ease of using the terminal software	.487	-.578	-.177	.286	-.043	-.373	.026	.210	.057	.450	-.534	-.163	.264	-.039	-.345	.024	.194	.052
22. Transfer via Credit Card facility	.444	-.459	-.443	.068	.179	-.386	-.325	-.206	.204	.399	-.412	-.397	.061	.160	-.347	-.292	-.185	.183
21. Annual Maintenance Charges (AMC)	.374	.000	.532	-.148	-.409	.063	-.176	.168	-.146	.375	.000	.533	-.149	-.410	.063	-.176	.169	-.146
12. Collection of outstation Cheques facility	.454	.246	.482	-.081	-.193	-.086	-.215	.211	-.335	.445	.241	.472	-.080	-.189	-.085	-.210	.207	-.328
10. Drop/Pick facility of Cheques at the door step	.454	.220	.484	.267	-.341	-.250	-.192	-.158	.406	.416	.201	.443	.245	-.313	-.229	-.176	-.144	.372
24. Interest rate and credit allowance provided by the firm for marginal trading	.340	-.365	-.139	.693	-.052	-.046	-.077	-.283	-.396	.315	-.338	-.129	.643	-.048	-.043	-.071	-.262	-.367
25. Brand Image of brokerage firm	.050	.212	.181	.497	.018	.108	-.209	-.004	-.230	.054	.229	.196	.537	.019	.116	-.225	-.004	-.249
6. Ease of opening account	.396	-.144	.350	.458	.072	-.193	.257	.052	.131	.388	-.141	.343	.448	.071	-.189	.252	.051	.128
11. User-friendly website	.264	.186	.250	-.269	-.192	.007	.090	-.194	.140	.283	.200	.269	-.289	-.206	.007	.097	-.208	.151
2. Presence of the brokerage firm in other cities	.343	.247	.170	.153	.473	.160	.048	.051	.159	.385	.277	.191	.172	.530	.179	.054	.057	.178
1. Proximity of the brokerage firm	.470	.202	-.022	.077	.479	.092	-.250	.362	.182	.477	.206	-.023	.078	.487	.093	-.254	.368	.185
3. How often you use the services of a brokerage firm	.066	-.208	-.223	.188	-.470	.308	.241	.214	.297	.068	-.213	-.229	.192	-.482	.316	.247	.220	.305
4. Reliability of the tips/recommendations/SMS/research reports provided by the firm	.369	-.202	.139	.055	.408	.162	.143	.178	-.139	.400	-.218	.150	.060	.441	.176	.155	.192	-.151

5. Trading sessions by the experts	.177	.329	.161	-.085	.364	-.239	-.021	.057	-.075	.199	.372	.182	-.096	.411	-.270	-.024	.064	-.085
27. Ambience and environment within the brokerage firm	.343	.052	-.007	-.162	-.055	.076	-.511	.020	.250	.393	.060	-.008	-.186	-.063	.087	-.585	.023	.287
7. Customized services by relationship manager	.225	.142	.092	-.072	.222	-.011	.267	.240	.064	.287	.181	.117	-.092	.283	-.014	.339	.305	.082
16.Pleasant interaction with bank employees	.325	.011	-.110	.146	-.078	.206	.252	-.073	.389	.369	.012	-.125	.166	-.089	.234	.287	-.082	.442

Extraction Method: Principal Component Analysis.

a 9 components extracted.

Output 2 : Total Variance Explained

Total Variance Explained

Component	Initial Eigenvalues(a)			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
Raw 1	5.260	18.965	18.965	5.260	18.965	18.965	3.042	10.967	10.967
2	2.819	10.164	29.129	2.819	10.164	29.129	2.464	8.884	19.850
3	2.481	8.945	38.074	2.481	8.945	38.074	1.968	7.094	26.945
4	2.155	7.768	45.842	2.155	7.768	45.842	2.670	9.626	36.571
5	1.577	5.687	51.529	1.577	5.687	51.529	2.005	7.230	43.801
6	1.451	5.232	56.760	1.451	5.232	56.760	1.631	5.882	49.683
7	1.348	4.861	61.621	1.348	4.861	61.621	2.123	7.653	57.337
8	1.202	4.334	65.954	1.202	4.334	65.954	1.940	6.995	64.332
9	1.088	3.922	69.877	1.088	3.922	69.877	1.538	5.545	69.877
10	.958	3.455	73.331						
11	.884	3.187	76.519						
12	.767	2.765	79.284						
13	.704	2.537	81.821						
14	.666	2.402	84.223						
15	.609	2.197	86.420						
16	.563	2.030	88.451						
17	.501	1.807	90.258						
18	.438	1.580	91.839						
19	.388	1.397	93.236						
20	.371	1.339	94.575						
21	.313	1.127	95.702						
22	.254	.915	96.618						
23	.239	.862	97.480						
24	.229	.827	98.307						
25	.185	.667	98.974						
26	.147	.532	99.506						
27	.137	.494	100.000						
Rescaled 1	5.260	18.965	18.965	4.925	18.240	18.240	2.522	9.342	9.342
2	2.819	10.164	29.129	2.315	8.573	26.813	2.356	8.727	18.069
3	2.481	8.945	38.074	2.236	8.281	35.093	2.288	8.472	26.542
4	2.155	7.768	45.842	1.915	7.094	42.187	2.259	8.365	34.907
5	1.577	5.687	51.529	1.711	6.336	48.523	2.143	7.936	42.843
6	1.451	5.232	56.760	1.330	4.925	53.448	1.703	6.306	49.149
7	1.348	4.861	61.621	1.504	5.570	59.019	1.695	6.278	55.427
8	1.202	4.334	65.954	1.195	4.428	63.446	1.688	6.253	61.679
9	1.088	3.922	69.877	1.110	4.112	67.559	1.587	5.879	67.559
10	.958	3.455	73.331						
11	.884	3.187	76.519						
12	.767	2.765	79.284						
13	.704	2.537	81.821						
14	.666	2.402	84.223						
15	.609	2.197	86.420						
16	.563	2.030	88.451						
17	.501	1.807	90.258						
18	.438	1.580	91.839						
19	.388	1.397	93.236						
20	.371	1.339	94.575						
21	.313	1.127	95.702						
22	.254	.915	96.618						
23	.239	.862	97.480						
24	.229	.827	98.307						
25	.185	.667	98.974						
26	.147	.532	99.506						
27	.137	.494	100.00						

Extraction Method: Principal Component Analysis.

a When analyzing a covariance matrix, the initial eigenvalues are the same across the raw and rescaled solution.

Output 3 : Communalities

Communalities

	Raw		Rescaled	
	Initial	Extraction	Initial	Extraction
1. Proximity of the brokerage firm	.970	.733	1.000	.756
2. Presence of the brokerage firm in other cities	.798	.511	1.000	.641
3. How often you use the services of a brokerage firm	.952	.642	1.000	.674
4. Reliability of the tips/recommendations/SMS/research reports provided by the firm	.855	.464	1.000	.543
5. Trading sessions by the experts	.784	.371	1.000	.474
6. Ease of opening account	1.043	.638	1.000	.612
7. Customized services by relationship manager	.618	.267	1.000	.432
8. Brokerage charges of the firm	1.304	.982	1.000	.753
9.Call centre facility	1.432	1.212	1.000	.847
10. Drop/Pick facility of Cheques at the door step	1.192	.965	1.000	.810
11. User-friendly website	.866	.341	1.000	.394
12. Collection of outstation Cheques facility	1.041	.753	1.000	.723
13.Customized trading software	1.076	.757	1.000	.704
14. Online trading	.877	.621	1.000	.708
15. Offline (via phone) trading	1.162	.928	1.000	.799
16.Pleasant interaction with bank employees	.775	.408	1.000	.527
17. Electronic transfer facility from bank account to trading account	.785	.552	1.000	.703
18. Detailed summary of account facility	1.219	.945	1.000	.776
19. Portfolio management services	1.062	.819	1.000	.771
20. Minimum balance criteria	1.764	1.515	1.000	.859
21. Annual Maintenance Charges (AMC)	.995	.697	1.000	.701
22. Transfer via Credit Card facility	1.243	.980	1.000	.788
23. Ease of using the terminal software	1.172	.873	1.000	.745
24. Interest rate and credit allowance provided by the firm for marginal trading	1.164	.996	1.000	.856
25. Brand Image of brokerage firm	.859	.437	1.000	.508
26.How important do you think are promotions for brokerage firms	.966	.491	1.000	.508
27. Ambience and environment within the brokerage firm	.761	.479	1.000	.630

Extraction Method: Principal Component Analysis.

Output 4 : Scree Plot