# Factors Measuring Client Satisfaction on Stock Broker Services in Pokhara Valley

Deepesh Ranabhat<sup>\*</sup> Sabina Subedi<sup>\*\*</sup> Mala Ranabhat<sup>\*\*\*</sup>

DOI: https://doi.org/10.3126/jnbs.v15i1.50383

Received on 20 April 2022

Accepted on 16 November 2022

#### ABSTRACT

Customer satisfaction is very important for the success of the business. This study measured the client satisfaction with broker services in Pokhara valley. Convenience sampling technique is used for selection of sample and 385 respondents who were trading stock in secondary market were taken as sample. Different twelve items were used to measure the clients' satisfaction. Means score, Exploratory Factor Analysis (EFA), and Confirmatory Factor Analysis (CFA) were used for data analysis. The study found majority of the clients are satisfied with the stock brokers' services in Pokhara valley. Further, responsiveness and trustworthiness were found as the major factors related to clients' satisfaction with stockbroker services. This study concluded that stockbrokers should be more responsive to the clients and their services should be trustworthy to increase the client's satisfaction.

Keywords: Client satisfaction, CFA, EFA, stock broker service, trustworthiness

#### **1. INTRODUCTION**

Customer Satisfaction is a key to success for every business organization, which is equally important for a service-oriented company like a stock brokerage firm. In the context of Nepal, the Securities Exchange center was converted into Nepal Stock Exchange (NEPSE) in 1993. Then, 50 stock brokerage firms with 43 branches began to act as intermediaries in the trading of securities as per the Securities Act-2007, rules, and bye-laws (NEPSE).

<sup>\*</sup> Mr. Ranabhat is an Assistant Professor at Faculty of Management Studies, Pokhara University. Email: deepeshrana2000@gmail.com

<sup>\*\*</sup> Ms. Subedi is a research scholar at School of Business, Pokhara University. Email: subedisabina058@gmail.com

<sup>&</sup>lt;sup>\*\*\*</sup> Ms. Ranabhat is a research scholar at School of Business, Pokhara University.

Email: malarana1991@gmail.com

Corresponding Author: Deepesh Ranabhat.

According to Kotler, satisfaction is the emotion that follows from evaluating how well a product performed in comparison to the outcomes that were anticipated. The customer is not satisfied if the performance fell short of their expectations. The customer will be satisfied if performance lives up to expectations. Customer Satisfaction is a word that summarizes the feelings of customers that they hold about their experiences with a company (Hill et al., 2007). Customer satisfaction in brokerage companies is significantly influenced by the characteristics of services and how the service is delivered to customers (Shukla & Upadhyaya, 2013). Customer satisfaction depends upon the awareness provided to investors about share trading. As the investor receives the appropriate information at the correct time, the customer can enjoy victory from share trading. The concerned authorities should conduct awareness and training programs for the investors (Rao, 2018).

Brokers serve as a middleman between investors and the stock exchange. People must open a DEMAT account and trading account with a broker in order to begin investing and trading. They can also open a DEMAT account through the bank. One can begin their investment only after connecting their bank account with these accounts. Although the share market in Nepal has evolved for many years ago very few people used to invest in it but after the new trading mechanism of trading stock through the DEMAT account came into practice, the number of investors in the Nepalese Share market was seen as increasing.

NEPSE started online trading in 2018, which has brought the Nepal share market into a new era of computerized trading. Due to the availability of complicated information at a faster rate with the help of technology (such as internet, e-banking, and online trading) the numbers of investors and traders in the share market are increasing day by day. As per the data of CDS and clearing limited, the DEMAT account has reached 52.60 lakhs which shows the interest of the public in the capital market (Investopaper, 2022). NEPSE has revealed there were a total of 594,879 active clients in all the broker offices combined up to March 04, 2021 (Share Sanar, 2021). The data revealed that the number of clients increased in the secondary stock market was very low in comparison to the number of people in the primary stock market. It might be due to a lack of stock-related knowledge, confidence, assurance, reliability, etc. among the Nepalese people which is not good for the development and stability of the Nepalese stocks market.

In the context of Pokhara, there are eight branches of broker offices according to data revealed by NEPSE. The number of clients is increasing each day but the newcomers in the market may lack sufficient knowledge about the secondary stock market. In this situation, are they getting proper guidance from the broker? Does the broker show their interest in resolving the issue of a client? Do they provide prompt services to their client? Are there any factors that need to be considered by the broker to improve their service quality and clients' satisfaction? These research questions need to be answered to improve client satisfaction in broker services as well as in other service sectors. So, this study aims to measure the current level of client satisfaction with broker services and find out the most influential factors related to client satisfaction in broker services.

# 2. LITERATURE REVIEW

Customer satisfaction is very important in all types of business including the service sector. To measure customer satisfaction, a survey research tool called SERVQUAL was created by Parasuraman, Zeithaml, and Berry in 1988. It is based on five service quality dimensions that include reliability, responsiveness, assurance, empathy, and tangibles. It is organized on the idea that customers can assess a company's service quality by contrasting their perceptions of the services with their expectations for those services. The SERVQUAL model has been utilized as the most popular assessment instrument for service quality by researchers, corporations, and educators.

Yang and Fang (2004) explored the service quality attributes affecting online customer satisfaction with securities broker services. The study identified 16 dimensions of satisfaction and dissatisfaction and highlighted that responsiveness, reliability of service, competence and ease of use are the major drivers of online customer satisfaction. Shukla and Upadhyaya (2013) conducted a study in Indore city to identify the various factors that are significant in fulfilling the customer's needs on the services provided by broking agencies. This study found that the quality of services and the response of the broking agencies are the major factors that influence customer satisfaction.

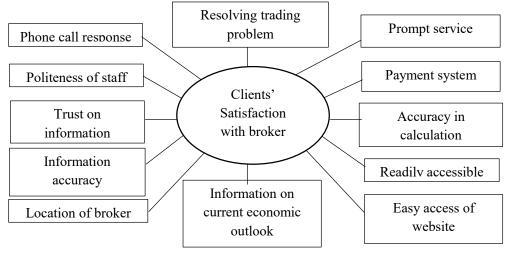
According to Al-Azzam (2015), increased service quality leads to increased customer satisfaction. Various measures of service quality including responsiveness, tangibility, empathy, reliability, and security significantly positively influenced customer satisfaction. Likewise, Sadiq Sohail and Al-Otaibi (2017) conducted a study on investors' satisfaction with the brokerage firm of the stock market to measure the degree of satisfaction with various investor services and to ascertain the factors influencing the investors' satisfaction. The study found reliability and credibility, information management, and special offers are important factors in affecting investor satisfaction.

Dhodary and Joshi (2019) in their study found that the assurance is the key factor in predicting investors' satisfaction. Upadhyay (2020) revealed a strong positive and significant relation between the combination of perceived service quality attributes (responsiveness, perceived reliability, empathy, and assurance) and investor satisfaction. Devkota et al. (2021) conducted a survey on online trading effectiveness in Kathmandu valley, Nepal. The study found that most of the investors are satisfied with the brokers' services. The study highlighted that the major problem related to online trading is the technological factor.

From the review of literature, the researchers have taken some dimensions and studied the clients' satisfaction with stock broker service in Pokhara. The model of the study is given in Figure 1 and the items and their sources are given in Table 1.

# Figure 1

Model of the Study



# Table 1

Measurement Items and their Source

Items	Source
Phone call response	Yang and Fang (2004)
Resolving trading	Yang and Fang (2004), Dhodary and Joshi
	(2019), Devkota et al. (2021)
Prompt service	Yang and Fang (2004), Dhodary and Joshi
	(2019), Upadhyay (2020)
Information on current economic outlook	Sadiq Sohail and Al-Otaibi (2017), Dhodary
	and Joshi (2019)
Politeness of staff	Yang and Fang (2004), Dhodary and Joshi
	(2019), Upadhyay (2020)
Payment system	Yang and Fang (2004)
Trust on information	Yang and Fang (2004), Sadiq Sohail and Al-
	Otaibi (2017)
Accuracy in calculation	Yang and Fang (2004)
Information accuracy	Yang and Fang (2004), Shukla and
	Upadhyaya (2013), Upadhyay (2020)
Readily accessible	Yang and Fang (2004), Shukla and
	Upadhyaya (2013), Dhodary and Joshi
	(2019), Upadhyay (2020)
Location of broker	Yang and Fang (2004)
Easy access of website	Yang and Fang (2004), Devkota et al. (2021)

#### **3. RESEARCH METHODOLOGY**

The study followed a descriptive cross-sectional research design. All the clients in Pokhara valley who are trading stock in the secondary market are the target population of the study, out of which 385 respondents (at 5% margin of error and 95% confidence interval) were taken as samples using the convenience sampling technique. The researchers used a self-administered questionnaire for the collection of required data which consisted of demographic information and twelve 5-point Likert Scale items to measure the clients' satisfaction. Data analysis was carried out using IBM SPSS. Means, Standard Deviation (SD), Exploratory Factor Analysis (EFA), and Confirmatory Factor Analysis (CFA) were used in this study.

The main purpose of this study is to find the most influential factors affecting client satisfaction in broker services. To fulfil the objective, the researchers started with 12 items that are related to client's satisfaction and EFA was used to reduce these items into few constructs. EFA helps to group the similar items into few meaning factors which are important. However, EFA simply does not confirm the model fitness, reliability and validity of the constructs. For this, the researchers did further analysis called CFA. It confirms the results of EFA with the help of model fitness indices, reliability and validity tests. The researchers used CMIN/DF, goodness-of-fit index (GFI), average goodness of fit (AGFI), comparative fit index (CFI) and root mean square error of approximation (RMSEA) for model fitness. Likewise, Cronbach Alpha and Composite Reliability (CR) was used for construct reliability, Average Variance Extracted (AVE) statistic for convergent validity, and Fornell and Larcker Criteria and Cross loadings for confirming the discriminant validity.

#### 4. RESULT AND DISCUSSIONS

This section includes the socio-demographic profile of the respondents, mean score analysis of clients' satisfaction with stock broker services, exploratory factor analysis (EFA), assessment of normality, confirmatory analysis (CFA), reliability and validity analysis, and brief discussion of results.

#### 4.1. Socio-Demographic Profile of the Respondents

Socio-demographic characteristics in this study include gender, age structure, education, family income, and average investment in stock of the respondents, which are presented in Table 2.

Table 2 reveals that majority of the respondents (65.19%) were males, while 34.81 percent were females. It indicates that males are more involved in stock trading than the females. Similarly, around half (49.09%) of the respondents belonged to the age structure of 16 to 25, and number of respondents were gradually decreasing with higher age group. Regarding education, most of the respondents (36.10%) were graduates followed by intermediate (24.16%), masters and above (20.26%), high school (13.25%), and literate only (6.23%). Likewise, the monthly family income of most of the respondents is Rs. 45,000 and above.

Variables	Categories	Frequency	Percent
Gender	Female	134	34.81
	Male	251	65.19
Age structure	16-25	189	49.09
	26-35	98	25.45
	36-45	63	16.36
	46-55	27	7.01
	56 & above	8	2.08
Education	Literate	24	6.23
	High School	51	13.25
	Intermediate	93	24.16
	Graduate	139	36.10
	Master and above	78	20.26
Family Income	Below Rs. 15,000	28	7.27
(NPR)	Rs. 15,000 to 24,999	42	10.91
	Rs. 25000 to 34,999	70	18.18
	Rs. 35000-44,999	90	23.38
	Rs. 45000 and above	155	40.26
	Total	385	100.0

# Socio-Demographic Characteristics

# 4.2. Clients' Satisfaction with Stock Broker Service

Different 12 items were used to measure the clients' satisfaction with stock broker service. A 5-points Likert Scale was used where 1 denotes highly dissatisfied and 5 denotes highly satisfied. The mean score of the responses is presented in Table 3.

Table 3 reveals that all these items (except information provided on the current economic outlook) used to measure client satisfaction with broker services are considered by the stock brokers and are given importance in Pokhara. The mean score above the average value of 3 denotes that majority of the clients are satisfied with different services provided by the stock broker office. The mean score of the items range from 2.89 to 4.05. The majority of the clients are more satisfied with the accuracy in calculation with the mean score of 4.05. It is followed by location of broker office with the mean score of 3.92, politeness of staff with the mean score of 3.88, easy access of website with the mean score of 3.81 and so on.

Item code	Items	Mean	SD
I1	Phone call response	3.43	0.97
I2	Resolving trading problem	3.65	0.85
I3	Prompt service	3.41	0.85
I4	Information provided on current economic outlook	2.89	1.03
I5	Politeness of staff	3.88	0.82
I6	Trust on information provided	3.59	0.78
Ι7	Payment System	3.59	0.91
I8	Accuracy in calculation	4.05	0.78
I9	Information accuracy	3.64	0.83
I10	Readily accessible to client	3.53	0.88
I11	Location of broker office	3.92	0.87
I12	Easy access of website	3.81	0.90

Mean Score of Items Related to Clients' Satisfaction

Note. N= 385, 1 denotes highly dissatisfied, and 5 denotes highly satisfied).

# 4.3. Exploratory Factor Analysis

An exploratory factor analysis (EFA) was run to find the major factors related to client satisfaction in broker services in Pokhara Valley using 12 items mentioned in Table 1. Initially, the communalities of three items – I4, I11, and I12 were found less than the acceptance limit of 0.5 so these items were removed. After removing these items, again EFA was conducted and in the second stage all the values of communalities were found above 0.5, however, one item (I5) was cross-loaded on two factors so, again this item was removed. Finally, EFA was run with 8 items, and all the values of extraction were found above the acceptance range of 0.50 (which is given in Table 4).

# Table 4

Communalites

Item code	Items	Initial	Extraction
I1	Phone call response	1.00	0.765
I2	Resolving trading problem	1.00	0.760
I3	Prompt service	1.00	0.618
I6	Trust on information	1.00	0.545
I7	Payment system	1.00	0.564
I8	Accuracy in calculation	1.00	0.661
I9	Information accuracy	1.00	0.735
I10	Readily accessible to client	1.00	0.608

The appropriateness of EFA was measured by Kaiser-Meyer–Olkin (KMO) and Bartlett's test of sphericity as presented in Table 5. The value of KMO is 0.865, which is greater than the threshold value of 0.6 (Kaiser, 1974). It means that the sample size is sufficient to run the EFA. Similarly, the p-value of 0.001 in Bartlett's test of sphericity demonstrates high correlation between the constructs' components, making factor analysis appropriate (Hair et al., 2010).

Kaiser-Meyer-Olkin Measure	of sampling adequacy.	0.865
Bartlett's Test of Sphericity	Approx. Chi-Square	834.087
	Df	28
	Sig.	.000

After checking the appropriateness, exploratory factor analysis was run on the 8 items after deleting the 4 items. The result of factor analysis was determined using varimax rotation based on the number of eigenvalues greater than one. Two factors had eigenvalues greater than one. The first factor comprises 4 items (I1, I2, I3, I10), and the second factor comprises 4 items (I6, I7, I8, I9). These factors were named responsiveness, and trustworthiness respectively that explained 65.69% of the variance in total. The first factor (responsiveness) explained 34.053 % and the second factor (trustworthiness) explained 31.637 % variance. Table 6 shows the result of EFA.

# Table 6

#### Result of EFA

Factor	Items	Loadings	% of	Cumulative
racioi	Items	Loadings	Variance	%
	Phone call response	0.871		
Daananairranaaa	Resolving trading problem	0.830	24.052	24.052
Responsiveness	Prompt service	0.757	34.053	34.053
	Readily accessible to client	0.626		
	Trust on information	0.690		
Trustworthiness	Payment system	0.600	21 627	65 600
	Accuracy in calculation	0.794	31.637	65.690
	Information accuracy	0.851		

#### 4.4. Assessment of Normality

Normality test determines whether or not a set of data fits normal distribution. The basic statistical tools for testing normality are skewness and kurtosis. According to (Hair et al., 2010), the cut off limit for skewness and kurtosis below  $\pm 2$ , which indicates there is no deviation from the data normality. The skewness and kurtosis statistics of measurement scales of both responsiveness and trustworthiness is given in Table 7. All the values for skewness and kurtosis are below  $\pm 2$ . This indicates the normality of the data.

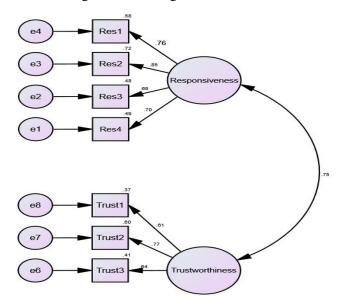
The Journal of Nepalese Business Studies

itestiti oj iteriti				
Variable	Min	Max	Skewness	Kurtosis
trust4	1	5	0.469	0.283
trust3	1	5	0.777	1.137
trust2	1	5	0.676	0.518
trust1	1	5	0.299	0.239
res4	1	5	0.468	-0.033
res3	1	5	0.443	0.099
res2	1	5	0.486	0.379
res1	1	5	0.322	-0.457

# **Table 7**Result of Normality Test

#### 4.5. Confirmatory Analysis (CFA)

After getting the results of EFA, it was confirmed with confirmatory factor analysis (CFA). Initially, CFA was carried on two factors with 8 items: Responsiveness (4 items) and trustworthiness (4 items). However, only 7 items were loaded in two factors. The outcome demonstrates that each item has a significant loading.



The summary of the measurement model results is given in Table 8. It reveals that the value of CMIN/DF = 2.366 which is lower than the acceptable value of 3. The other fit indices are goodness-of-fit index (GFI), average goodness of fit (AGFI), comparative fit index (CFI) and root mean square error of approximation (RMSEA). The outcome of GFI = 0.967, AGFI = 0.928 and CFI = 0.973 meet the criteria of more than 0.90 and RMSEA=0.073, also meet the criteria of less than 0.08. Therefore, the fit indices values show that the measurement model is good.

Model I li Summary		
Index	Criteria	Result
CMIN/DF	< 3	2.366
GFI	> 0.90	0.967
AGFI	> 0.90	0.928
CFI	> 0.90	0.973
RMSEA	< 0.80	0.073

Model Fit Summary

# 4.6. Reliability and Validity Analysis

The researchers used Cronbach Alpha and Composite Reliability (CR) to establish the construct reliability. Construct reliability is established if the threshold value is above 0.70 in both Cronbach Alpha and Composite Reliability (Hair et al., 2011). Likewise, the Average Variance Extracted (AVE) statistic is used to establish convergent validity, and Fornell & Larcker Criteria, and Cross loadings are used to assess the discriminant validity. According to Fornell & Larcker (1981), discriminant validity is established if the square root of AVE of a construct is higher than the correlation of the construct with all other constructs. Similarly, under cross-loading criteria, discriminant validity is established when the factor loadings of all items on the parent construct are greater than factor loadings in other constructs (Henseler et al., 2015).

# Table 9

Reliability and Construct Validity

Construct	Cronbach's alpha	Composite reliability	AVE
Responsiveness	0.837	0.89	0.67
Trustfulness	0.715	0.84	0.636

Cronbach Alpha, Composite Reliability, and AVE results are presented in Table 9. In this study, the value of both Cronbach's Alpha and Composite Reliability are above the required threshold of 0.70. Hence, reliability was established. Likewise, the AVE of both responsiveness and trustworthiness is greater than the required value of > 0.5. Therefore, the convergent validity was established.

# Table 10

Discriminant Validity- Fornell Lacker's Criteria

	Responsiveness	Trustworthiness
Responsiveness	0.819	
Trustfulness	0.604	0.798

Table 10 shows that the value of the square root of AVE of responsiveness (0.819) and the value of square root of AVE of trustworthiness (0.798) are greater than the correlation between the two constructs (0.604). These results provide strong evidence for discriminant validity.

	Responsiveness	Trustworthiness
Res1	0.814	0.420
Res2	0.870	0.538
Res3	0.780	0.434
Res4	0.809	0.558
Trust1	0.447	0.760
Trust2	0.554	0.848
Trust3	0.430	0.782

Discriminant Validity- Cross Loadings

Cross loadings of items used to measure the constructs are presented in Table 11. The table reveals that the loadings of the items of responsiveness (Res1, Res2, Res3, Res4) are higher in its parent construct than loadings on trustfulness and the loadings of the items of trustfulness (Trust1, Trust2, Trust3) are higher in its parent construct than loadings on responsiveness. Hence, discriminant validity is established.

#### 4.7. Discussion

This study measured the clients' satisfaction on stockbroker services using 12 different items related to satisfaction. The study found that most of clients are satisfied with the major services provided by the stock brokers in Pokhara valley. This finding is similar to the results of Devkota et al. (2021), which found that most investors are satisfied with the brokers' service in Nepal. The study used exploratory factor analysis (EFA) to reduce the different items used for measuring satisfaction into few important factors and EFA result found two important factors – responsiveness and trustworthiness related to clients' satisfaction. Further, the result of EFA was validated with model fitness indices, reliability and validity test in confirmatory factor analysis (CFA). The findings are consistent with the results of Yang and Fang (2004), Al-Azzam (2015) that responsiveness and service reliability, Shukla and Upadhyaya (2013) response of brokers, and Sadiq Sohail and Al-Otaibi (2017) reliability and credibility are major factors affecting clients' satisfaction.

#### **5. CONCLUSION**

This study aimed to find out the clients' satisfaction with stockbroker services in Pokhara valley. The study finds majority of the clients are satisfied with the stock brokers' services in Pokhara valley. This study also finds responsiveness and trustworthiness are the major two factors related to clients' satisfaction with stockbroker services. This finding was supported by EFA, CFA, and reliability and validity analysis. So, it is concluded that stock brokers should be more responsive in terms of phone call response, resolving the trading problem, providing prompt service, and readily accessible to the client and they should be trustworthy in terms of information provided, payment system, and accuracy in the calculation to increase the client's satisfaction.

The findings of this study are very helpful to the stock brokers to increase client satisfaction and retain their clients. However, this study was limited to Pokhara valley only so, the findings may not be applicable to other regions.

#### REFERENCES

Al-Azzam, A. F. M. (2015). The impact of service quality dimensions on customer satisfaction: A field study of Arab bank in Irbid city, Jordan. *European Journal of*  Business and Management, 7(15), 45-53.

- Devkota, N., Budhathoki, A., Paudel, U. R., Adhikari, D. B., Bhandari, U., & Parajuli, S. (2021). Online trading effectiveness in Nepal Share Market: Investors awareness, challenges and managerial solution. Asian Journal of Economics, Business and Accounting, 21(5), 90–98. Doi: https://doi.org/10.9734/ajeba/2021/v21i530385
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39. Doi: https://doi.org/10.2307/3151312
- Hair, J.F., Black, W.C., Babin, B.J., & Anderson, R.E. (2010). *Multivariate data analysis*. Pearson Education Limited.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. Journal of Marketing Theory and Practice, 19(2), 139–151. https://doi.org/10.2753/MTP
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. https://doi.org/10.1007/s11747-014-0403-8
- Hill, N., Roche, G., & Allen, R. (2007). Customer satisfaction: The customer experience through the customer's eyes. Cogent Publishing Ltd.
- Kaiser, H.F. (1974). An index of factorial simplicity. Psychometrika, 39(1), 31-36.
- Kotler, P., & Keller, K. L. (2009). Marketing management. Pearson Prentice Hall.
- Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multi-item scale for measuring consumer perceptions of service quality. *Journal of Retailing*, 64, 12-40
- Rao, D. (2018). A study on role of demographic factors and awareness level of Investors towards Investment pattern in Stock Market. *International Journal of Advanced Research and Development*, 3(2), 534–538.
- Sadiq Sohail, M., & Al-Otaibi, M. F. (2017). Investor satisfaction with brokerage firms: A study of the stock market in an emerging country. *Amity Global Business Review*, *12*, 7–14. https://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=122514401
- Shukla, R. K., & Upadhyaya, A. (2013). Determinants of customers' satisfaction for stock broking services: An empirical analysis. *Pacific Business Review International*, 5(7), 74-83.
- Upadhyay, D. J. (2020). Investors' perception towards service quality of dematerialized (DEMAT) account in Nepal. *Studies in Social Science Research*, 1(2), 26. Doi: https://doi.org/10.22158/sssr.v1n2p26
- Yang, Z., & Fang, X. (2004). Online service quality dimensions and their relationships with satisfaction: A content analysis of customer reviews of securities brokerage services. *International Journal of Service Industry Management*, 15(3), 302–326. Doi: https://doi.org/10.1108/09564230410540953