A Study on Importance and Satisfaction of Service Quality for Online Stock Trading

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ABSTRACT

With the development of internet has brought the revolutionary impact for the way of traditional financial investment. Securities have scrambled to launch online stock. Therefore, it is directed at online trading investors' demands to understand service quality that customers really care, and improve them is becoming increasingly essential topic. This study attempts to construct importance - satisfaction analysis model to become helpful reference for the existent or new entrant securities in implementing online stock trading service quality. Also it provides securities industry's objective criteria to evaluate the performance of implementing service quality. The empirical results show that importance - satisfaction analysis model can define the quadrant of service quality elements that contributes to securities industry in administration strategic mean.

Keywords: *online trading, service quality, customer satisfaction*

INTRODUCTION

The rise of internet has brought a revolutionary impact to the traditional mode of investment. Along with the gradually matured and popularized of internet, eCommerce has become a new sales channel as well. Securities & financial businesses have been engaged in the online trading one by one; the establishment of internet securities operators and eBank has become the trend of stage. Via the content designing of the securities companies in internet, the investors not only are able to be informed the real time quotation, most securities also provide bunch of internet services, such as financial news, portfolio packages information as well as the industry analysis research etc. .. To the investor, compared with the traditional placing order by front desk trader, "online trading" not only increase its usability without limitation of time and space, low cost, and also provided with new channel of obtaining knowledge of portfolio management.

Since the first online trading company, E*Trade started in adopting online trading in 1995, its advantage of boundaries, no time zone difference and low cost has abruptly attracted many potential investors. Along with the popularity of internet development, maturity of the information technology, added up the low cost or online trading in comparison with the traditional phone place order or front desk trader, many newly established securities or traditional securities have put full effort in the online trading. Along with more and more engagement of securities, the competition has become stricter as well.

Fonvidlle(1997) pointed out, customer satisfaction is the key to successful business in sustaining operating, Reichheld & Sasser(1990)； Jacob(1994)； Bolton(1998)； Richard (1998) also pointed out: customer satisfaction also affects the business in profitability, Cronin and Taylor(1992)； Zeithaml and Bitner (1996)；Ruyter, et al. (1997) ；while, Intter & Larcker (1998) found service quality is the primary factor in affecting the customer satisfaction. For the securities that set up the virtual internet platform

for remote customers in trading is a great challenge, particularly in providing high quality service, thus it is a worthy topic to discuss in the service quality of online trading.

This study is focused on the analysis of service quality of securities online trading. Via questionnaire in surveying the current customers who engaged in the online trading to understand how they recognize the importance of the service quality and the satisfaction to the services as provided; in the mean time, to build up the importance-satisfaction index of the service quality in providing the proposal to the current securities with online trading facilities.

LITERATURE REVIEW

The Analysis of Security Online Trading in Operating

According to the definition of Gomez (1998), the securities online trading means those securities that provide trading platform via internet in trading the securities. Where, the securities don't require providing trading desk lobby, no traders, all they need is simply a virtual internet trading platform and automatic voice phone system in accepting the investors trading orders. Trombly(2001)；Santini (1996) thought the online trading in U.S. has occupied most of the market share that many online trading securities are facing difficulties like deficit, lay-off, customers leaving, and retreat from the market. According to the study of Peterson(2000)；Fan et al., (2000), the search cost on internet in U.S. has been greatly reduced but meanwhile reduced the loyalty of customers to the securities that the issue of online trading service quality provided by the securities is worth of study.

Service Quality

Crosby, et al., (1990) defined the service quality as testers recognized objectively the feeling as brought by the service after enjoying it, and the relationship of traders and customers which determines the future possibility in continuous trading. Even later Lag ace, et al., (1991) revised the relative quality model proposed by Crosby, et al., (1990), as well as the quality model proposed by Fletcher, et al., (2000) later on, they were focused on the service quality which business entity provided to the customers; where, Davis (1989) has ever divided the online trading service quality into two aspects: the application and practical usage of the web site. This study considered it is necessary to probe in further about the service quality of the online trading.

Parasuraman、Zeithaml、and Berry (hereunder abbreviated to P. Z. B.) proposed "service quality concept model" in 1985, who believe the service quality is determined by the customer satisfaction, and also affected by the consumers whose past experiences and subjective recognition that the service performance of the service providers are lacking of practical assessment criteria and is not easy to assess objectively. P. Z. B published the assessing form in surveying the service quality in 1985, which is called "SERVQUAL" form. Where, the form is based on the 10 attributes of the service quality as mentioned above and each develops about 10 aspects individually and made it total 97 items; besides, P. Z. B. have further organized them into 5 key factors in total 22 items.

Carman (1990) further developed the procedure as applied in the SERVPUAL form by P.Z.B (1988), and verified SERVPUAL measurement came with rather high stability; however, the aspects of four different services were not necessarily the same, which are not exactly the same as that of the 5 service items proposed by P.Z.B. (1988). Regarding the service quality in the SERVPUAL measurement, even there included 22 issues in 5 aspects, there did not mention about the "pricing" issue. Zeithaml and Binter (1996) thought the reason why pricing was not paid attention in the measurement of the service

quality was because consumers lacked of significant value of reference; however, in a fully developed internet nowadays, the reference price is easy to obtain. For this, building up a complete security online trading in surveying the service quality is necessary. Therefore, this study shall particularly do the analysis on the service quality of online trading which including the pricing factor; also to further understand the satisfaction of the service quality.

Marr (1986) thought the quality measurement by customer orientation is easier to find out if customers are satisfactory; where, he proposed 11 basic principles in designing "quantized satisfaction of consumers". Zeithaml and Bitner(1996) proposed "Relationship chart of customers' recognition of service quality and customers satisfaction" to segregate this two concepts; where, defining service quality, including 5 factors of service quality as recognized by the customers; while, satisfaction is broadly affected by the service quality, product quality, pricing, situation and personal factors. Thus, this study shall take the concept of segregation in analyzing the satisfaction of service quality and customer recognition, and trying to build up the analysis model of customer service quality in importance-satisfaction. This is not only to probe in another layer of service quality, but also provide management decision authority the tool in drafting up the operating strategy.

METHODS

The Structure of Concept

In review of the past documents and studies, the empirical study of the service quality item for various industries is not exactly the same; while, different service quality items as proposed are not the same as well. Thus, this study based on the initial first 10 service quality factors in 1985 and the revised 5 main factors in 1988 according to the study result of P. Z. B. appropriately increased the service quality variables fit to online trading for analysis. Besides, via the service quality measurement of Marr (1986), build up the analysis model of importance-satisfaction of service quality by utilizing it in assessing the current online trading service quality what the individual securities provided to the customers.

Questionnaires in Design

The questionnaires "The importance-satisfaction survey of the online trading service quality provided by the securities" proposed by this study is focused on the investors who currently engaged in the online trading. Based on the 22 items suggested by P. Z.B., combined with the related study of online trading (Gomez，1998) and drafted up initial script, then delivered to the front desk traders and supervisors of trading department of the target securities engaged in the online trading for the precedent test, during this first stage the wordings not clearly specified, unfeasible business terms were deleted or edited; then, did the second stage revision in deleting those eigenvalue less than 1; finally a 25 items service quality criteria of online trading was obtained for further official survey The 25 online service quality surveying items provided by Securities in assessment are as shown in table 1; where, each item is measured by 10-point level of Likert-type Scale; meanwhile, request acceptors in answering the importance and satisfaction as recognized.

Sampling

The sampling strategy as adopted in this study -- after questionnaires have been tested and revised, partial of them would be distributed for the convenience of sampling; where, the customers sample in selection is only considered the convenience in approach that 250 people including a certain university

students and the target securities staff were engaged for the second stage analysis; the third stage of official survey is adopted simple random sampling. Where, based on the current customers of the target securities who engaged in the online trading, randomly pick for the acceptors of surveying, which is emailed to the individual investors as selected; where the obsolete were abandoned. Finally 958 effected questionnaires have been obtained.

RESULTS

The Analysis of Securities Online Trading Service Quality Items

In order to understand the customers' recognition of importance and satisfaction in online trading service quality, the study was focused on the security online trading service quality items via questionnaires in surveying how customers determine the importance/ satisfaction of the online trading service. The score was accumulated by leveling the 10-point of Likert-type Scale in measurement of each service quality item according to the customers' recognition of the importance and satisfaction, and obtained the average score of each variable. Where, the importance and satisfaction of the personal private information, the security of trading and the correctness of information are ranked front 3, which is worthy of securities operators paying attention to, as shown in table 1.

Table 1: Analysis of customers' recognition of importance and satisfaction of online trading service quality provided by securities

Questionnaires code	Variable name	Average value of importance of service quality item after standardization	Average value of satisfaction of service quality item after standardization
Q1	The stability of website system	0.87	0.56
Q2	The faultless planning the safe trading and fine risk control	1.10	1.21
Q3	Secure the customers' privacy of personal information	1.18	1.43
Q4	Website provides sufficient research report and market information	-0.21	-0.41
Q5	Answering the investors' question in real time	-0.56	-0.40
Q6	system down can be fixed immediately	0.78	0.03
Q7	The real time auto response of online trading	0.14	-0.16
Q8	Real time update of the website information	0.06	-0.03
Q9	commission rebate	-0.52	-2.70
Q10	Preferential promotion	-3.24	-2.32
Q11	providing personalized portfolio service according to the individual customer's demand	-1.37	-1.32
Q12	diversified online monetary products trading	-1.26	-0.74
Q13	Steady and fast in desk trading	0.90	0.83
Q14	Easy operation in online trading	0.41	0.86
Q15	Multiple function in online trading	-0.62	-0.40
Q16	Screen layout simple and clear	-1.35	-0.01
Q17	Correct real time quotation system	0.98	1.04
Q18	Simple and convenient application of online trading	-0.21	0.65

Q19	Website connection fast	0.72	0.16
Q20	Sufficient broadband in executing online trading and inquiry	0.86	0.21
Q21	Customers' center service	-0.05	-0.12
Q22	Professional financial literacy the trader should have	0.03	0.21
Q23	The service attitude that trader should have	0.42	0.64
Q24	System online inquiry service	0.50	0.99
Q25	Abundant website information	0.32	0.34

The Analysis of Importance-Satisfaction of the Online Trading Service Quality Item Provided by Securities

The study has built up the importance-satisfaction model of the service quality in assessment -- via attribute evaluation chart (importance-performance coordination); further to evaluate the current customers of the target securities who engaged in the online trading with its attribute in analysis. First, utilizing 25 items criteria of the online trading service quality in assessment standardize the average score of the importance of service quality as recognized by the customers, as well as the satisfaction item.

According to the service quality in measurement by Marr (1986), analyze the average after standardization of those 25 items online trading service quality of its importance and satisfaction (can be considered the performance criteria of the company) as recognized, segregate out 4 quadrants in description.

1st Quadrant (High Satisfaction, High Importance)

Customers recognized high importance and high satisfaction of the online trading service quality provided by the securities in this quadrant, which indicates the securities, perform very well in the service attribute that customers paid attention to, which should be maintained as existed. The1st quadrant includes Q1、Q2、Q3、Q6、Q13、Q14、Q17、Q19、Q20、Q22、Q23、Q24、Q25.Where, Q6 standardized satisfaction approached to zero, but with rather high in importance; while Q22 standardized importance approached to zero with rather good satisfaction as recognized.

2nd Quadrant (Low Satisfaction, High Importance)

Customers recognized high importance and low satisfaction of the online trading service quality provided by the securities in this quadrant, which indicates the securities perform not very well in the service attribute that customers paid attention to, which the upgrading the quality should be considered. The 2nd quadrant includes Q7 and Q8. Indicates these two items should be intensified.

3rd Quadrant (Low Satisfaction, Low Importance)

Customer’s recognized low importance and low satisfaction of the online trading service quality provided by the securities in this quadrant, which indicates the securities, perform not well in the service attribute that customers not paid attention to. 3rd quadrant includes Q4、Q5、Q9、Q10、Q11、Q12、Q15、Q16、Q21. It is noted that both the importance and satisfaction of Q9、Q10、Q11、Q12 are low. While, Q9、Q10、Q11 in this study can be classified the benefit factor, i.e. customers did not pay attention to benefit factor and would not recognize the satisfaction as well as it is not able to obtain reasonable measurement from the service quality assessment.

4th Quadrant (High Satisfaction, Low Importance)

Customers recognized low importance and high satisfaction of the online trading service quality provided by the securities in this quadrant, which indicates the securities perform very well in the service attribute that customers not paid attention to, indicates extra effort and capital were in vain.. The 4th quadrant includes Q18.

CONCLUSION AND IMPLICATIONS

The comprehensive analysis of the importance and satisfaction of online trading service quality provided by the securities, it is found in the importance-satisfaction model of a 25 items of service quality attributes, the 1st quadrant (high satisfaction, high importance) comes with 13 service quality attributes that customers recognized important and satisfactory, indicated the security should maintain this 13 service quality. 2 items located in the 2nd quadrant (low satisfaction, high importance), includes automatic deal feedback of online trading (Q7) and website update in real time (Q8), which customers recognized important but not satisfactory that online trading securities should improve at the first priority. Apparently the target company in survey did not reach the customers' criteria of satisfaction which worth the related authority in improving. There are 9 items located in the 3rd quadrant (low satisfaction, low importance) that customers recognized not important as well as not satisfactory, thus securities should not spent too much resources on them. There is only one item located in the 4th quadrant (high satisfaction, low importance) is the simple and convenience of applying online trading (Q18); where the target company performed very well in the attribute (Q18) which customers are not really care about, indicated the securities wasted resources.

In this study, we considered the 1st quadrant the advantageous keeping zone; where, the service items located in this quadrant should be particularly taken care of and thrown in appropriate resources in keeping the advantage of competitiveness. The 2nd quadrant is the improving zone at the first priority; where, the service quality item located in this quadrant should be improved at the first priority. The 3rd quadrant is a zone with unclear issues; where the items located in this quadrant should be carefully controlled and assessed before throwing into the resources. The 4th quadrant is a zone with over-satisfaction; where, the items located in this quadrant have been invested too much and caused resources distorted, which should be restricted immediately.

The service quality in consideration for the different service businesses is not exactly the same, thus when the business is in assessing the self service quality should carefully choose proper measuring tool so that the data collected would not deviate seriously which results in wrong decision. The 25 criteria of the service quality item as developed by this study from 3 stages should be worthwhile for the securities.

While, business should base on the optimal performance in allocating its resources; except qualifying the data, the quantized data should also be referred in understanding the self competitiveness so as to draft strategy. It is concluded that the importance-satisfaction model of service quality as built by this study should be a fine tool in drafting operating strategy for online securities.

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