The e-service is a long term marketing thought for many organizations, established on the assurance of cost effective models of providing customer services. Recent growth in the use of internet services has also provided opportunities for service companies to offer better quality service to their consumers. The main aim of the paper was to carry out the theoretical perception on the role of e-service. The current development in technology have created a powerful movement in knowledge based self service or e-service, and it is also creating a role of differentiation in provision of customer services. The advantages of internet also create a new opportunities for business to construct strategic link with their consumers. A self-complete survey was used to collect data from a convenience sample of 272 Pakistani respondents who use online banking. Factor analysis and structural equation modelling were used to test the proposed model of relationships. Online e-trust, perceived quality and intention to use, have impact on subjective disconfirmation. Subjective disconfirmation does have a relationship to quality and e-loyalty. However, the efficiency dimension of online service quality is related to e-trust and also indirectly to relationship strength through e-trust. The personal need and site organization dimensions of online service quality are related to e-loyalty, with personal needs exhibiting the strongest impact. Also, the loyalty has stronger impact on behavioural intention and word of mouth.

**Key words:** E-service, antecedents, consequences, subjective disconfirmation.

**INTRODUCTION**

In today’s competitive world, the e-banking has emerged as a different concept in the technological findings of the previous generation. Automated teller machine, internet banking, credit and debit cards have changed the consumer distribution channel for banking products. In Pakistan, foreign banks introduced both debit and credit cards in early 1990’s and later, this facility was accepted by domestic banks. In Pakistan, this slow appearance of e-banking products was due to the high start up costs and lack of technological skills. Later, the government of Pakistan also encouraged e-banking with the announce-ment of Electronic Transaction Ordinance 2002. Presently, commercial banks in Pakistan have the facility of their own ATM networks, debit and credit cards. All banks ATM’s are also connected through one link network, so the customer can use any bank card on the other bank’s ATM for their transaction purpose (Kaleem and Ahmad, 2008).

The internet today is the fastest medium for marketing of product and services. Through research, many opportunities disclose that the real driving forces behind outburst growth of virtual marketplace are cost effectivenes, 24/7 provision of service, boundary-less market and more interaction with customers. The customers are
are also appreciating these e-service innovations in banking sector. Customer adoption issue is the main critical factor towards the potential of e-service in the future for creating more market space for consumers in the banking industry (Kaleem and Ahmad, 2008).

The service marketing is a mixture of both technology and internet. Both customers and companies are appreciating e-services at higher rate than ever before, estimated by Forrester research (Chaffey, 2002). The term e-business is used for buying and selling, providing customer service and collaboration with partner through web. It has two main dimensions; e-commerce and e-service (Chen, 2001). This study supports the contrasting relation between traditional consumer based service marketing and emerging e-banking industry.

Objectives of the study

The objectives of this study are listed thus:

1. To find out the idea of the subjective evaluation of the difference between performance of product and similar standard in the World Wide Web (www).
2. To examine the ways by which online customers become satisfied with the product quality.
3. To analyze the ways by which individual disconfirmation can be reduced in the online world.
4. To study the effect of perceived quality, trust and intentions on subjective disconfirmation.
5. To check the model of antecedents and consequences of subjective disconfirmation in e-service.

Rationale of the study

E-service is just at infancy stage and getting popularity in Pakistani financial regulated marketplace. In banking centre of Pakistan, the customers are getting familiar day by day with the e-service facilities. The basic idea behind is to emphasize the provision of e-service facilities to customers on the day to day basis and also to get a chance feedback about the e-service facility. This study will help the industrialists and banking industry to understand the online purchase intentions of the customers and to understand the customer buying behaviour.

Literature review

E-trust

E-trust is a well established and discussed limitation of customers online purchase plan and even it contributes to further commitment for discussed (bank) brand (Carmel and Scott, 2007). A trusted online customer would be more interested in trust worthy brand. If the trust is backed with some perceived factors like security, privacy and information, it also strengthens the relationship (Hoffman and Novak, 1996). As risk and trust in the online environment are relevant, which clearly shape purchase intentions (Zhao et al., 2010). E-trust is considered to be a milestone while achieving the goal of loyalty through service reception and delivering service industry (Ribbink et al., 2004). The corporate image of financial institution contributes to trust, both in traditional and the online environment (Flavian et al., 2005). Furthermore, the strong trust feelings have a meaningful impact on online purchase intentions across cultures (Jin et al., 2008). Online transactions especially in financial institutions, widens trust and strongly pursue consumer purchase intentions (Yap et al., 2010). While lack of trust can not only seriously harm, but also deters the online purchase intentions (Merrilees and Fry, 2003). By catering the factors of perceived risk and privacy in developing countries, banks can urge the customer to move ahead for online services (Jaruwachirathanakul and Fink, 2005). The internet can never be declared a truly secure means of transaction (Wang et al., 2003) while financial institutions can have a positive impact for behavioural intentions by building trust and credibility. Online banking adoption depends upon an element of perceived trust (Mukherjee and Nath, 2003).

Intentions to use

Intentions are a pathway to purchase and adoption of online banking services in online environment. Perceived usefulness and intentions to use, are key determinant in adoption of online purchase decision (Guriting and Ndubisi, 2006). Customer’s previous experience of online environment, relationship with bank and received references from peer and authenticated source builds up the intentions to take up the online banking services (Karjuloto et al., 2002). Nature of online products is also an antecedent of developing the online banking adoption in some developed markets (Kolodinsky et al., 2004). Whereas, the most attractive and useful online products can generate more customer base by adding intentions to use, where as the key factors, always remain the same. Innovativeness of customers has positive relation in adoption of e-banking facility. Where, customer awareness about technological improvement is an important factor (Lassar et al., 2005). Online banking facility requires a great level of perceived trust that can lead a customer to build up his mind for adopting online banking (Kassim and Abdulla, 2006; Aldas-Manzano et al., 2009). Some cost saving issues and useful offers can seduce
a customer to make a shift towards online banking by developing healthy intentions (Shih and Fang, 2004). Online banking acceptance highly matters on perceived effectiveness and information on e-banking on the website (Pikkarainen et al., 2004). An established online environment contributes towards intentions to online purchase (Yen and Lu, 2008).

**Perceived quality**

The hope of the consumer about the service is the positive factor to assess the perceived service quality that is a higher hope, which leads to higher perceptions of quality (Hamer, 2006). Consumer satisfaction is based on the perceived relationship quality. The first moment reaction of the consumer and behavioural influence of purchase are indicators of perceived relationship quality (Moliner et al., 2007). The customer satisfaction has more impact on the consumer buying behavior than service quality, as perceived service quality exists before customer satisfaction (Lee et al., 2000). A mutual belief of employees plays an important part in improvement of perceived service quality, as employee training has an influence on perceived service quality. The customer satisfaction also intervenes between perceived service quality and financial performance (Yoo and Park, 2007).

**Subjective disconfirmation**

Subjective disconfirmation is a process between consumer’s performance evaluations and some pre performance standards (Taylor and Hunter, 2002). Disconfirmation is the disagreement between consumer expectation and retailer’s actual performance. Oliver (1980) suggested that consumer performance is compared by the initial expectations of the product. If there is positive disconfirmation, then an increase in satisfaction was hypothesized, whereas, if there is negative disconfirmation, a decrease in satisfaction was expected. Disconfirmation can be measured directly, as expectation (perceived performance) is an antecedent of disconfirmation. Measure of disconfirmation and its claimed antecedents have direct relationship and it can be assessed (Tse and Wilton, 1988). The subjective disconfirmation has more importance after the usage of product because it leads to possible differences in a consumer’s belief and also carried out the consumer’s opinion of the perceived difference between the expectation and performance (Taylor and Hunter, 2002).

Disconfirmation in subjective form is measured by taking a separate subjective evaluation of the product performance and desired expectations. So, subjective disconfirmation is a psychological process based on the disagreement between perceived product performances (Tse and Wilton, 1988).

**E-quality**

Transforming quality cost measurements into value provides a better explanation regarding the effect of prevention and appraisal activities on the quality improvement indicators. Thus, the value of quality improvements is a measure of return on quality improvements (ROQI), which indicates whether the quality improvement efforts gave higher, fair, or lower return (Setijono and Dahlgaard, 2008).

In spite of shared attributes between traditional service quality and e-banking service quality, many traditional service quality features are of no use and e-fundamentals such as trust, accessibility, service quality, and flexibility, become visible as important factors to the e-banking service (Loonam and O’Loughlin, 2008).

There are significant differences between the two internet user groups (online buyers and information searchers) regarding their perceptions on the identified dimensions. Furthermore, all of the four dimensions (web site design/content, trustworthiness, prompt/reliable service, and communication) significantly influence online buyers’ evaluation of overall online service quality, while only three dimensions (web site design/content, trustworthiness, and communication) have a significant impact on information searchers’ assessment of overall online service quality (Cai and Fun, 2003).

**E-satisfaction**

Satisfaction measures the inner state of the consumer value and its behavior. To measure customer satisfaction is a difficult task, as satisfaction with distribution service, impact the consumer repurchases decision about the product. Oliver (1997) clarifies about customer satisfaction, that it is based on the customer experience about the usage of product. Szymanski and Hise (2000) observed that consumer understanding of online services and product services have a significant role in e-satisfaction assessments.

**E-loyalty**

The web site performance or e-service quality was found to be an important antecedent of customer satisfaction and loyalty (Semijin et al., 2005). Online loyalty, or e-loyalty, has been conceived as a consumer’s intention to buy from a web site, and that consumers will not change to another web site (Flavian, 2006). Devaraj (2002) claimed
claimed that repeated satisfaction with purchases eventually leads to customer loyalty. Cyr et al. (1995) conducted the only study in which e-loyalty has been considered with respect to culture. In this instance, e-loyalty (in relation to web site design) was tested for users in four countries. It was expected that users would be more loyal to the local than to the foreign web site. However, the results were inconclusive and only Americans demonstrated a clear preference for the local site. There was no significant difference in loyalty for Canadians and Germans, and counter to expectations, the Japanese were more loyal to the foreign site.

**Word of mouth**

Word of mouth can create a spark on internet at any time through effective campaigns (Ferguson, 2008). There are four categories of e-business discussion forums that is, information request, usage experience, business practice issues, and comments about the new product launches (Andreassen and Streukens, 2009). WOM has its own importance in the mind of consumers about the e-service. Consumers rely much on the WOM to minimize the perceived risk associated with repurchase intention (Murray, 1991).

Now, WOM has much importance in the e-service marketplace. The focus on the creativity and service quality management is related to WOM, customer satisfaction and repurchase intention (Miller, 1999).

**Behavioural intentions**

Satisfaction is based on the three dimensional construct of positive, negative and bi-directional emotions. There is a significant relationship between the bi-directional and consumers complain behaviour (White and Yu, 2005).

Bauer (2006) presented a model of behavioural intentions, including factors such as repurchase intentions, word of mouth, loyalty, consumer complaining behaviour, and price sensitivity. Good service quality leads to favourable behavioural intentions while a bad service quality tends to unfavourable behavioural intentions.

**THEORETICAL MODEL AND HYPOTHESIS**

This study focuses on the research model to reveal the antecedents and consequences of subjective disconfirmation. The researchers proposed the theoretical model and path diagram based on the literature review, as represented by Figure 1.

The researchers developed the following hypothesis on the basis of literature review:

- \( H_1 \): ‘E-Trust’ has a positive impact on ‘Subjective Disconfirmation’.
- \( H_2 \): ‘Perceived Quality’ has a positive impact on ‘Subjective Disconfirmation’.
- \( H_3 \): ‘Intention to Use’ has a positive impact on ‘Subjective Disconfirmation’.
- \( H_4 \): ‘Subjective Disconfirmation’ has a positive impact on ‘Quality’.
- \( H_5 \): ‘Subjective Disconfirmation’ has a positive impact on ‘Satisfaction’.
- \( H_6 \): ‘Quality’ has a positive impact on ‘Satisfaction’.
- \( H_7 \): ‘Satisfaction’ has a positive impact on ‘Loyalty’.
- \( H_8 \): ‘Loyalty’ has a positive impact on ‘Behavioral Intentions’.
- \( H_9 \): ‘Loyalty’ has a positive impact on ‘Word of Mouth’.

Table 1 encompasses the theoretical background of the hypothesized relationships of the proposed research model.

**RESEARCH METHODOLOGY**

**Sample**

Population of this study comprises the bank customers using online facility in Pakistan between ages of 24 and 60, having access to the e-banking services. Convenience sampling technique was used to collect the data from the respondents located in twin cities of Pakistan, Rawalpindi and Islamabad. Prior to the survey, the questionnaire was pretested, using a convenience sample size of 50. The purpose of the pretest was to ensure readability and a logical arrangement of questionnaire items. Excluding pretest questionnaires a total of 445 questionnaires were distributed by e-mail or manually to the online banking facility users. The response rate was 61.2% which was 272 valid questionnaires that were received from the sample size of this study.

**Instrument**

A 30-item questionnaire was used to collect the data. The questionnaire comprised ten sections. First section measured the demographic characteristics of the respondents. Second section consisted of three items (ET1, ET2 and ET3) to measure ‘E-trust’ originally developed by (Ko de Ruyter et al., 2000). ‘Perceived Quality’ and ‘Intentions to Use’ were measured by the 4-item and 2-item scale respectively, adapted from the study of Oliver (1997). ‘Subjective Disconfirmation’ was measured by 3-item scale developed by Oliver and Taylor (1997). A 3-item scale was used to measure ‘Quality’ and 4-item scales were used to measure ‘Satisfaction’ and ‘Loyalty’ developed by Oliver (1997). 4-item scales were used to measure ‘Behavioural Intentions’ and ‘Word of Mouth’ adopted from the study of Walker (2001) and Zeithaml et al. (1996),
Figure 1. Theoretical model and path diagram.

respectively. All the items of the questionnaire were rated on 5 point Likert scale (5 = ‘Strongly disagree’ to 1 = ‘Strongly Agree’).

Procedure

The researchers used Structural Equation Modelling (SEM) technique to test the theoretical model of this study and to analyze the relationships between the variables in the model. The researchers used SPSS 17.0 for data entry, coding and descriptive analysis. Visual Partial Least Squares (VPLS) 1.04 was used to run the model.

DATA ANALYSIS AND FINDINGS

Reliability and validity

The researchers used Cronbach alpha and Guttman split-half reliability coefficient measures to confirm the reliability and validity of the research instrument. The value of Cronbach’s alpha and Guttman split-half coefficient ranges from 0.60 to 0.90 for all measures, except loyalty which has the value of 0.43. The researchers removed two items, L1 and L2 from the ‘Loyalty’ scale for further analysis. The value of Cronbach’s alpha and Guttman Split-half coefficient for the two item scale of loyalty improved to 0.88 and 0.89, respectively, which lies down within the acceptable range. Table 2 presents the values of Cronbach alpha and Guttman Split-half coefficients of the constructs of the study.

The researchers developed the following hypothesis based on the literature review. The researchers used VPLS version 1.04b1 to compute composite reliability and average variance extracted of the underlying
Table 1. Theoretical support of hypothesized relationships.

<table>
<thead>
<tr>
<th>Hypothesized relationships</th>
<th>Theoretical support</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1: E-trust Subjective Disconfirmation</td>
<td>(Carmel and Scott, 2007; Hoffman and Novak, 1996; Jin et al., 2008; Mukherjee and Nath, 2003; Tse and Wilton, 1988).</td>
</tr>
<tr>
<td>H2: Perceived Quality Subjective Disconfirmation</td>
<td>(Hamer et al., 2006; Tse and Wilton, 1988; Yoo et al 2007; Moliner et al., 2007; Lee et al. 2000).</td>
</tr>
<tr>
<td>H3: Intentions to use Subjective disconfirmation</td>
<td>(Guriting et al. 2006; Karjuloto et al., 2002; Kolodinsky et al., 2004; Tse and Wilton, 1988; Kassim et al., 2006; Alda et al., 2009; Lassar et al. 2005).</td>
</tr>
<tr>
<td>H4: Subjective Disconfirmation E-Quality</td>
<td>(Tse and Wilton, 1988; Setijono et al., 2008; Loonam et al., 2008; Cai et al., 2008; Johnson et al., 1999).</td>
</tr>
<tr>
<td>H5: Subjective Disconfirmation E-Satisfaction</td>
<td>(Tse and Wilton, 1988; Oliver, 1997).</td>
</tr>
<tr>
<td>H6: Quality Satisfaction</td>
<td>(Setijono et al., 2008; Loonam et al., 2008; Cai et al. 2008; Johnson et al., 1999; Oliver, 1997).</td>
</tr>
<tr>
<td>H7: Satisfaction Loyalty</td>
<td>(Oliver, 1997; Semijen et al., 2005; Flavian, 2006; Cyr et al. 2005).</td>
</tr>
<tr>
<td>H8: Loyalty Behavioral Intentions</td>
<td>(Semijen et al., 2005; Flavian, 2006; Cyr et al., 2005; White and Ting Yu, 2005; Bowyer, 1996; Burton, 2003).</td>
</tr>
<tr>
<td>H9: Loyalty Word of Mouth</td>
<td>(Semijen et al., 2005; Flavian, 2006; Cyr et al. 2005; Ferguson, 2008; Andreassen and Streukens, 2009; Murray, 1991; Miller, 1999).</td>
</tr>
</tbody>
</table>

Table 2. Reliability coefficients of the constructs.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Number of items</th>
<th>Cronbach’s alpha coefficient</th>
<th>Guttman split-half coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-trust</td>
<td>3</td>
<td>0.63</td>
<td>0.81</td>
</tr>
<tr>
<td>Perceived quality</td>
<td>4</td>
<td>0.99</td>
<td>0.99</td>
</tr>
<tr>
<td>Intention to use</td>
<td>2</td>
<td>0.99</td>
<td>0.995</td>
</tr>
<tr>
<td>Subjective disconfirmation</td>
<td>3</td>
<td>0.92</td>
<td>0.89</td>
</tr>
<tr>
<td>Quality</td>
<td>3</td>
<td>0.97</td>
<td>0.77</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>4</td>
<td>0.97</td>
<td>0.96</td>
</tr>
<tr>
<td>Loyalty</td>
<td>2</td>
<td>0.88</td>
<td>0.89</td>
</tr>
<tr>
<td>Behavioural intentions</td>
<td>4</td>
<td>0.66</td>
<td>0.82</td>
</tr>
<tr>
<td>Word of mouth</td>
<td>4</td>
<td>0.83</td>
<td>0.83</td>
</tr>
</tbody>
</table>

constructs. The two measures are widely used to confirm the consistency of all the measures of the construct and to check the construct validity of the research instrument (Skerlavaj et al., 2007; Koufteros, 1999; Kifle et al., 2007; Rodriguez et al., 2007; Kim and Malhotra, 2005; Jardon and Martos, 2009). There is no specific benchmark for the composite reliability and AVE in the literature (Skerlavaj et al., 2007), various values are recommended by the theorists in literature such as 0.7 (Kifle et al., 2007; Rodriguez et al., 2007; Kim and Malhotra, 2005), 0.8 (Koufteros, 1999) and 0.6 (Diamantopoulos and Siguaw, 2000) for the composite reliability. The minimum acceptable value of AVE suggested in the literature is 0.5 (Rodriguez et al., 2007; Bagozzi et al., 1991; Pavlou and Gefen, 2004) and 0.4 (Diamantopoulos and Siguaw, 2000).

Table 3 reveals the coefficient of composite reliability and AVE (average variance extracted) of the constructs of the study. All the constructs meet the minimum criteria of 0.6 for the composite reliability except ‘Loyalty’ whose
value is 0.39. The researcher decided to keep the construct for further analysis due to the importance of concept in the conceptual model. The average variance extracted (AVE) for all the constructs is either greater or close to the minimum benchmark of 0.4 (Diamantopoulos and Siguaw, 2000).

The value of AVE indicates that latent variables capture at least 40% of the variance of the underlying concepts which is a significant quantity (Jardon and Martos, 2009). The values of composite reliability and AVE confirm the reliability and validity of the model, considering the ‘Loyalty’ parameters with caution.

Table 4 reveals the factor structure matrix of loadings of the variables of the study. Figure 2 reveals the measurement model and the estimated parameters of the research model. The researchers used bootstrap structural model method to analyze the effects of variable in the model. Table presents the model estimation by bootstrapping.

E-trust has a positive impact (regression coefficient = 0.180 and t-statistic = 0.189) on subjective disconfirmation, which is significant at 0.05 level. The hypothesis H1 is supported. Perceived quality has a positive impact (regression coefficient = 0.396 and t-statistic = 0.494) on subjective disconfirmation, which is significant at 0.01 level. The Hypothesis H2 is supported. The intention to use, has a positive impact (regression coefficient = 1.191 and t-statistic = 2.165) on subjective disconfirmation, which is significant at 0.05 level. The hypothesis H3 is supported. The subjective disconfirmation has a positive impact (regression coefficient = 0.997 and t-statistic = 4.210) on quality, which is significant at 0.01 level. The hypothesis H4 is supported. The subjective disconfirmation has a positive impact (regression coefficient = 0.372 and t-statistic = 0.932) on satisfaction, which is significant at 0.01 level. The hypothesis H5 is supported. The quality has a positive impact (regression coefficient = 1.370 and t-statistic = 4.033) on satisfaction, which is significant at 0.01 level. The hypothesis H6 is supported. The satisfaction has a positive impact (regression coefficient = 0.992 and t-statistic = 10.889) on loyalty, which is significant at 0.01 level. The hypothesis H7 is supported. The loyalty has a positive impact (regression coefficient = 0.994 and t-statistic = 7.083) on behavioural intentions, which is significant at 0.01 level. The Hypothesis H8 is supported. The loyalty has a positive impact (regression coefficient = 0.951 and t-statistic = 5.570) on word of mouth, which is significant at 0.01 level. The hypothesis H9 is supported.

Managerial implications

The findings of this study have many implications for those companies that are interested in offering e-services to its customers. The first implication is derived from the fact that e-trust, perceived quality, and intention to use, has an important influence on the customer attitude and behaviour in terms of subjective disconfirmation.

Further, the whole e-service is based on delivering the quality services to the final customer, which creates satisfaction in the eyes of consumer about the company product. This shows that companies should communicate a strong e-image to its consumers through various communication channels.

Finally, the role of customer loyalty, consumer behavioural intentions, and word of mouth, is important as the significant consequences of customer satisfaction in the e-service world.

Conclusion

E-CRM has grown tremendously since the mid 1990’s (Bannon, 2001). Industry growth is nontrivial, in that, e-marketplace services spending worldwide will increase at a compound annual growth rate of 27%, from $ 5.2 billion in 2000 to $ 17 billion in 2005 (Young, 2001). We have every reason to believe that the movement of e-service by service marketers will continue to grow worldwide over the foreseeable future.
Table 4. Factor structure matrix of loadings of the variables.

<table>
<thead>
<tr>
<th>Factor</th>
<th>Variable</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-trust</td>
<td>ET1</td>
<td>0.0530</td>
</tr>
<tr>
<td></td>
<td>ET2</td>
<td>0.9989</td>
</tr>
<tr>
<td></td>
<td>ET3</td>
<td>0.9990</td>
</tr>
<tr>
<td></td>
<td>PQ1</td>
<td>0.9860</td>
</tr>
<tr>
<td></td>
<td>PQ2</td>
<td>0.9520</td>
</tr>
<tr>
<td></td>
<td>PQ3</td>
<td>0.9983</td>
</tr>
<tr>
<td></td>
<td>PQ4</td>
<td>0.8241</td>
</tr>
<tr>
<td>Perceived quality</td>
<td>ITU1</td>
<td>0.9882</td>
</tr>
<tr>
<td></td>
<td>ITU2</td>
<td>0.8652</td>
</tr>
<tr>
<td>Intention to use</td>
<td>SD1</td>
<td>0.9861</td>
</tr>
<tr>
<td></td>
<td>SD2</td>
<td>0.9860</td>
</tr>
<tr>
<td></td>
<td>SD3</td>
<td>0.9621</td>
</tr>
<tr>
<td>Subjective disconfirmation</td>
<td>Q1</td>
<td>0.9928</td>
</tr>
<tr>
<td></td>
<td>Q2</td>
<td>0.9861</td>
</tr>
<tr>
<td></td>
<td>Q3</td>
<td>0.9729</td>
</tr>
<tr>
<td>Quality</td>
<td>S1</td>
<td>0.9913</td>
</tr>
<tr>
<td></td>
<td>S2</td>
<td>0.9477</td>
</tr>
<tr>
<td></td>
<td>S3</td>
<td>0.9971</td>
</tr>
<tr>
<td></td>
<td>S4</td>
<td>0.9684</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>L3</td>
<td>0.7852</td>
</tr>
<tr>
<td></td>
<td>L4</td>
<td>0.5829</td>
</tr>
<tr>
<td>Loyalty</td>
<td>BI1</td>
<td>0.9516</td>
</tr>
<tr>
<td></td>
<td>BI2</td>
<td>0.9551</td>
</tr>
<tr>
<td></td>
<td>BI3</td>
<td>0.9631</td>
</tr>
<tr>
<td></td>
<td>BI4</td>
<td>0.5192</td>
</tr>
<tr>
<td>Behavioural intentions</td>
<td>WOM1</td>
<td>0.9859</td>
</tr>
<tr>
<td></td>
<td>WOM2</td>
<td>0.9746</td>
</tr>
<tr>
<td></td>
<td>WOM3</td>
<td>0.9719</td>
</tr>
<tr>
<td></td>
<td>WOM4</td>
<td>0.8296</td>
</tr>
</tbody>
</table>

The aim of this study was to explore the link between e-trust, perceived quality and intention to use with subjective disconfirmation in online service quality. The model further explores the consequences of subjective disconfirmation on quality, satisfaction, loyalty, behavioural intentions and word of mouth. The model also explores that subjective disconfirmation has positive impact on both quality and satisfaction and quality and satisfaction are also interlinked with each other in online service quality. However, this finding needs to be qualified by noting that small strength indirect links were found between the “user-friendliness” and “efficiency” dimensions of online service quality. In addition, an indirect association was found via e-trust in the website (that is, e-trust). In other words, if banks want to develop strong relationships with customers, this generally would not automatically occur simply through provision of higher levels of online service quality, even though some
Figure 2. The measurement model and the estimated parameters of the research model. * t-statistic in braces
** Path Coefficients in Italics

Table 5. Bootstrap-structural models.

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Entire sample estimate</th>
<th>Mean of sub-sample</th>
<th>SE</th>
<th>t-statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-trust</td>
<td>0.180</td>
<td>0.539</td>
<td>0.954</td>
<td>0.189</td>
</tr>
<tr>
<td>Subjective disconfirmation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perceived quality</td>
<td>0.396</td>
<td>0.829</td>
<td>0.802</td>
<td>0.494</td>
</tr>
<tr>
<td>Subjective disconfirmation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intentions to use</td>
<td>1.191</td>
<td>0.787</td>
<td>0.550</td>
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<tr>
<td>E-satisfaction</td>
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- E-trust indicates a positive relationship between E-trust and Subjective disconfirmation.
- Perceived quality indicates a positive relationship between Perceived quality and Subjective disconfirmation.
- Intentions to use indicates a positive relationship between Intentions to use and Subjective disconfirmation.
- Subjective disconfirmation indicates a positive relationship between Subjective disconfirmation and E-quality.
- Subjective disconfirmation indicates a positive relationship between Subjective disconfirmation and E-satisfaction.
aspects of online service quality may indirectly assist in maintaining the relationship.

REFERENCES


