INFLUENCE OF INTERNET BANKING SERVICE QUALITY ON CUSTOMER SATISFACTION- AN INDIAN EXPERIENCE

SC Vetrivel 1*, J. Rajini 2, V. Krishnamoorthy 3

1 Associate Professor, Department of Management Studies, Kongu Engineering College, Perundurai-638060 India.
2 Assistant Professor, Department of English, School of Science and Humanities, Kongu Engineering College, Perundurai-638060. India.
3 Assistant Professor, Department of Management Studies, Kongu Engineering College, Perundurai-638060. India.

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Abstract
This paper identifies the dimensions of internet banking service quality and the influence on customer satisfaction. The research is based on a theoretical model which consists of five internet bank service quality dimensions and one exogenous variable. The data have been collected from 250 bank customers. A total of 250 Internet Bank customers participated in the study and provided data. The researchers used convenience sampling method for collecting data from the respondents. The findings of factor analysis revealed five dimensions of internet bank service quality, namely Responsiveness, Trust, Convenience, Efficiency of Website and Security. Among the internet bank service quality dimensions, trust and efficiency of a website were found to be positively affecting customer satisfaction. These study findings would help the policy makers in general, bank officials in particular to develop suitable policies relating to internet bank service quality.

Keywords: Responsiveness, Service Quality, Efficiency of Website, Security, Trust

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INTRODUCTION
Banking services are important in human being’s life. Of late, banks have been undergoing operational difficulties owing to the ever changing technology and expectations of the bank customers. As a result, to provide efficient customer services, banks have used technology as a tool to deliver financial services. Furthermore, many foreign banks and private bank branches operating in India have increased. These competitions are increasing in the banking sectors and customer expectations towards banking services have also increased. In the dynamically changing banking sector, product variation is difficult as most banks offer similar services. Hence, it becomes essential for the banks to differ from other banks by means of service quality (Stamenkov and Dika, 2015) to enhance customer fulfillment.

Prior studies found that almost all the banks in India use internet banking as a delivery channel and strategic tool for business development (Safeena et al., 2014). Prior studies have found the benefits of net banking usage and highlighted that internet banking service is beneficial for banking sectors and customers (Alwan and Al-Zubi, 2016; Rohi, 2016; Martins et al., 2014; ). SERQUAL model was used to quantify the service quality of the internet banking (Han and Back 2004; Rod et al., 2009; Zafaret et al.,2012). The way customer perceives the service quality of net banking varies from traditional service. Therefore, examining the service quality in the internet banking is essential (Ho and Lin, 2010; Choudhury, 2013; Sing and Kaur, 2013; George and Kumar, 2014; 2015; Ranaweera and Sigala, 2015). Therefore, it is indispensable to know how service quality dimensions of the internet banking make an impact on the customer satisfaction.

Previous researches on service quality revealed that banking service quality determines the customer insight of the comprehensive service quality of the banks, by facilitating them to create sustainable competitive advantage” (Stamenkov and Dika, 2015, Meuter et al., 2000). Internet banking is significant for both customers and banks as it offers an extensive range of transactions irrespective of the time and place (Alkailani 2016). However, internet banking reduces staff resources and physical facilities in the banks. Prior studies on service quality, using SERQUAL or SERVPERF scales for assessing the service quality. In the service marketing literature some researchers found customer satisfaction as a precursor of service quality (Parasuraman et al., 1985, Bitner et al., 1990; Carman, 1990;) and other researchers have considered that service quality is a precursor of customer satisfaction (Amin and Isa, 2008; Anderson and Sullivan, 1993; Cronin et al., 2000; Sheng and Liu, 2010, Yap et al., 2012). Prior studies conducted by researchers have not studied the usage of internet banking in developing countries and the reason for the low penetration of online services (Khodakarami and Chan, 2013; Maitah and Hodrab, 2015; Al-Ajamand Nor 2015; Tarhinet al., 2016).

This research study throws light on significant contribution to the literature on service quality of internet banking by exposing how service quality dimensions will influence customer satisfaction. This study identified five vital dimensions of service quality (Responsiveness, Trust, Convenience, Efficiency of Website and Security). Therefore, better understanding Internet Banking Service Quality will help bank officials in particular, to develop and monitor better strategies to maintain a good rapport with their customers.

REVIEW OF LITERATURE:
An attempt has been made by Muslim Amin (2016) to study the internet banking service quality and its influence on e-customers’
satisfaction and e-customers’ loyalty. This study identified four distinct constructs. These are: personal need, site organization, user friendliness and efficiency of the website. This study found that the efficiency of the website is a significant dimension of internet banking quality. Yang and Fang (2004) revealed that ease of use and usefulness are essential dimensions of internet banking quality. Zeithaml et al., (2004) identified that access, personalization, efficiency, flexibility, reliability, ease of navigation, responsiveness, security/privacy, assurance/trust, site aesthetics and price knowledge are the dimensions of e-service quality. Previous research studies have found that service quality is positively associated to customers' satisfaction in the context of an online environment (Han and Back, 2004). Jayawardhana (2004) identified 5 dimensions of service quality like access, website interface, trust, attention and credibility. Chien-Ta Bruce Ho and Wen-Chuan Lin (2010) found that customer service, web design, preferential treatment, assurance, and information provision are the dimensions of internet banking service quality. Yee et al., (2011) pointed out that internet banking service quality is related to customer satisfaction. A study conducted by Rod et al., (2009) found that online information system quality, customer service quality, and banking service product quality have impact on internet banking service quality. Santouridiset al., (2009) found that empathy and web assistance play a key role in recommending the service to customers. Thachonet al., (2014) found that network quality, information support, customer service, privacy and security are influenced by service quality.

**Research Model**

This research study is approached by the following model:

![Diagram of Research Model]

**Objectives of the Study**

The main aim of the study is to identify the dimensions of internet banking service quality and its impact on customer satisfaction.

**METHODOLOGY**

This study was conducted in Coimbatore district, a city in Tamilnadu, India. The sample consisted of customers who have accounts with private and public sector banks. The researchers used questionnaire method for collecting data from the bank customers. The questionnaire comprises of three sections. The first part consists of the demographic profile of Bank customers, second part and the third part consists of variables relating to Internet Banking Service Quality dimensions and Customer Satisfaction respectively. The questionnaire was framed in both Tamil and English. Before collecting the data, the aim of the research was described to the customers. The researchers collected data through a convenience sampling method. Out of 320 customers contacted, 280 customers immediately agreed to answer the questionnaire. 30 questionnaires were removed on account of missing data. Therefore 250 questionnaires were collected from the customers. The data collection exercise was done on the select banks over four months at different time intervals. Before administering the questionnaire to the respondents', content validity of the questionnaire was ensured by means of careful review. The variables relating to the present study were adopted from the previous works of Herington and Weaven 2009; Parasuraman et al., 1988

**Proposed Hypothesis**

H01: There exists a relationship between Responsiveness and customer satisfaction.

H02: There exists a relationship between Trust and customer satisfaction.

H03: There exists a relationship between Convenience and customer satisfaction.

H04: There exists a relationship between Efficiency of website and customer satisfaction.

H05: There exists a relationship between Security and customer satisfaction.
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Table I - Demographic Profile

| Sl. No | Profile Variables | Description | Percentage |
|--------|-------------------|-------------|------------|
| 1.     | Gender of the Respondents | Male | 66 |
|        |                    | Female | 34 |
| 2.     | Annual Income      | Below Rs. 2,00,000 | 36 |
|        |                    | Rs. 2,00,000 – Rs. 5,00,000 | 41 |
|        |                    | Rs. 5,00,000 – Rs. 10,00,000 | 19 |
|        |                    | Above – Rs. 10,00,000 | 04 |
| 3.     | Occupation         | Business man | 54 |
|        |                    | Private Employment | 34 |
|        |                    | Agriculture | 12 |
| 4.     | Educational Qualification | Up to +2 | 18 |
|        |                    | Under Graduation | 37 |
|        |                    | Post Graduation | 28 |
|        |                    | Others | 17 |
| 5.     | Type of Account    | Current account | 38 |
|        |                    | Savings account | 52 |
|        |                    | Fixed deposit account | 10 |
| 6.     | Age of the Respondents | Less than 30 years | 22 |
|        |                    | 30 to 45 years | 28 |
|        |                    | 45 to 60 years | 29 |
|        |                    | Above 60 years | 21 |

Table 1 reveals the descriptive profile of the bank customers in which 66 percent of the respondents are men and 34 percent are women. As depicted in table no. 1, 41 percent of the respondents fall in the annual income of 2 to 3 lakhs rupees as yearly income. In total, 54 percent of the respondents own business as the occupation. In relation to educational qualifications, 37 percent of the customers completed undergraduate, 52 percent of the respondents had a savings account, 29 percent of the customers come under the age group of 45 to 60 years.

Table II - Reliability of the Data

| Dimensions            | No. of original items | No of items retained | Cronbach’s Alpha |
|-----------------------|-----------------------|----------------------|------------------|
| Responsiveness        | 4                     | 4                    | .781             |
| Trust                 | 4                     | 4                    | .727             |
| Convenience           | 4                     | 4                    | .763             |
| Efficiency of website | 5                     | 5                    | .717             |
| Security              | 5                     | 5                    | .711             |

Cronbach Alpha is administered to evaluate the internal consistency of the data. If the Cronbach Alpha value is greater than or equal to 0.7, it is considered acceptable for the data to be reliable (Hair et al., 2006). Since the Cronbach’s Alpha values of all the dimensions are above the limit, the service quality dimension factors have internal consistency.

Table III shows the results of factor analysis on the 22 service quality items categorised into five groups. The internet banking items were factored into five factors explaining 72.173 of the total variation.

Table III - KMO and Bartlett’s Test

| Kaiser-Meyer-Olkin Measure of Sampling adequacy | Bartlett’s Test of Sphericity |
|------------------------------------------------|-----------------------------|
|                                               | Approx. chi-square | df | Sig. |
|                                               | 621.964             | 231 | .000 |

Table IV - Result of the factor analysis - Rotated Component Matrix

| Items | Responsiveness | Trust | Convenience | Efficiency of website | Security |
|-------|----------------|-------|-------------|------------------------|----------|
| V1    | .745           |       |             |                        |          |
| V3    | .715           |       |             |                        |          |
| V7    | .703           |       |             |                        |          |
| V11   | .702           |       |             |                        |          |
| V2    |                | .664  |             |                        |          |
| V5    |                | .656  |             |                        |          |
| V10   |                | .599  |             |                        |          |
| V12   |                | .552  |             |                        |          |
| V4    |                |       | .772        |                        |          |
| V6    |                |       | .722        |                        |          |
| V8    |                |       | .674        |                        |          |
| V9    |                |       | .673        |                        |          |

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In order to validate the adequacy of the sample, Kaiser - Meyer - Olkin (KMO) and Bartlet’s tests were used. If the value of KMO test is greater than 0.50, it is revealed that each factor is adequate items for making proper group. From table III, the KMO value is more than 0.5 and the significance level is 0.000 which revealed that factor analysis is appropriate. Table III reveals that the value $x^2 = 621.964$, $df = 4.231$, significance ($P<0.001$) and the suitability of data for factor analysis. The factor analysis results in five factors.

| Factors | Unstandardized Coefficients | Standardized Coefficients | t | Sig |
|---------|-----------------------------|---------------------------|---|-----|
| Constant | .167 | .176 | .948 | .345 |
| Responsiveness | .136 | .098 | .124 | .398 | .168 |
| Trust | .184 | .087 | .177 | 2.124 | .036** |
| Convenience | .131 | .097 | .109 | 1.353 | .179 |
| Efficiency of website | .401 | .115 | .353 | 3.501 | .001** |
| Security | .071 | .090 | .072 | .797 | .427 |
| $R^2$ | .646 |
| F statistics | 36.300 |
| Significance | .000 |

** - Significant at the 0.05 percent level.

In order to study the impact IBSQ dimensions on customer satisfaction multiple regression analysis has been administered. The factor scores of the five service quality factors obtained from factor analysis (Responsiveness, Trust, Convenience, Efficiency of website and Security) represented the independent variables, whereas customer satisfaction represented dependent variables. Table V reveals that the overall regression model is significant ($F=36.300$, $p < 0.000$). Adjusted $R$ is 0.642 refers to 64.2 percent of the difference in the customer satisfaction is explained by five IBSQ dimensions. The findings correlated to trust reveal that it has impact on customer satisfaction ($\beta = 0.177$, $t = 2.124$, $p < 0.05$) the respondent does not have influence on customer satisfaction, ($\beta = .124$, $t = 1.398$, $p > 0.05$). The results reveal that efficiency of the website has an influence on customer satisfaction ($\beta = .353$, $t = 3.501$, $p < 0.05$). Furthermore, convenience ($\beta = .109$, $t = 1.353$, $p > 0.05$), Security ($\beta = .124$, $t = 1.353$, $p > 0.05$) does not show the impact on customer satisfaction.

CONCLUSION
The aim of this research study is to identify the IBSQ dimensions and also find which dimensions have significant impact on customer satisfaction. The researcher’s collected the data by using a questionnaire method. The results of exploratory factor analysis reveal that five dimensions (explaining for 72.173 percent of the total variance) like, Responsiveness, Convenience, Trust, Efficiency of the website, and Security were taken out. Five factors obtained from the factor analysis like Responsiveness, Convenience, Trust, Efficiency of the website, and Security have been considered as independent variables, Customer Satisfaction has been taken as the dependent variable. Considering the factors individually, Trust and Efficiency of the website are significant towards customer satisfaction. Other dimensions like Responsiveness, Convenience and Security do not have any significance. The findings of this study prove in line with Sohail and Shaikh (2008) and Herington and Weaven (2009).
proved that efficiency of the website is the highly influencing factor in IBSQ dimensions.

**LIMITATIONS & SCOPE FOR FURTHER STUDY:**
This research study has been accomplished in commercial banks operating in Coimbatore District, which limit the generalizability of the results. In the future, similar studies might be conducted in the wider area. As this study is cross-sectional nature, future studies might be conducted in the form of longitudinal studies so that the stability of the model in different time can be ascertained. This study has not been able to take customer loyalty in to consideration. This study considers only limited variables, in future numbers of variables could be considered. This study is country specific internet banking on service quality in India and might not be applicable to other countries. Therefore, in future comparative studies with regard to Internet Banking Service Quality might be conducted. Furthermore, the proposed model of this study explained only 72.173 percent of the variance in internet service quality factors. Therefore, future studies can focus on other important internet banking service quality dimensions.

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