

The Relationship Between E-Service Quality and Customer Satisfaction on Internet Banking in Klang Valley, Malaysia

Hazetul Razman Othman^{1*}, Roslan Mohd. Rose¹, Mohd. Saiful Mohd. Potri¹,
Mohd. Firdaus Ibrahim¹, Ahmad Ashraf Paharodzi¹

¹ Faculty of Business and Technology, UNITAR International University, Petaling Jaya, Malaysia

*Corresponding Author: hazetul@unitar.my

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Abstract: *Internet banking has drastically grown in usage over the last decade and is anticipated to continue developing at a rapid rate. As a result, banks are facing greater challenges with intense competition. Nonetheless, banks can maintain their competitive advantages by ensuring that their customers are satisfied. This study seeks to provide empirical evidence regarding the level of customer satisfaction with internet banking service quality in the Klang Valley. The six factors which can influence customer satisfaction toward internet banking include reliability, security, responsiveness, information, website design and privacy. 163 usable data were obtained through a survey form that was distributed randomly within Klang Valley. Overall the outcome of e-service quality analyses, indicates that it has a significant effect towards customer satisfaction on internet banking services within Klang Valley. However, intense analysis indicates that three out of six of the e-service quality dimensions carriable shows highly significant effect; reliability, security and website design variables.*

Keywords: e-service quality, customer satisfaction, internet banking, financial service, perceived value

1. Introduction

The rapid technological development in internet banking has been reported as the most important innovation for banking service deployment in the last decade. In Malaysia, Maybank was the first local bank to start offering internet banking services. By the end of 2000, other local banks also introduced such services, such as Hong Leong Bank and CIMB. As of June 2015, 31 banks offer internet banking in Malaysia and 19 million internet banking subscribers (Bank Negara Malaysia, 2015). Despite the growing number of internet banking users, customer adoption of internet banking has not reached the anticipated level. The public's lack of acceptance of internet banking was attributed to a number of factors, including the level of customer dissatisfaction and poor service quality (Li-hua, 2012). On the other hand, the level of enthusiasm among consumers due to a lack of basic information technology skills and fear of using technology has restricted them from opting for the use of internet banking (Karjaluo et al., 2002). This study's findings aim to provide empirical evidence regarding the level of customer satisfaction with the quality of internet banking services in the Klang Valley, Malaysia and offer suggestions based on the findings.

2. Literature Review

The e-service quality is becoming increasingly crucial in determining the success or failure of electronic business applications. Lewis and Booms (1983) defined service quality as “a measure of how well a delivered service matches the customers’ expectations”. Several other more recent scholars defined them as customers’ evaluation and judgement on the internet service quality rendered (Liao et al., 2011; Parasuraman et al., 2005; Bauer et al., 2006; Santos, 2003). Roland and Freeman (2010) expressed further that the e-service quality should reach global level, considering the level of service delivery, customer service and its support. Parasuraman et al. (2005) have developed the e-service quality (E-S-QUAL) model to enable the electronic service quality to be measured. The E-S-QUAL model consists of four dimensions, namely, efficiency (i.e. ease and speed of accessing), fulfillment (i.e. order fulfillment system availability and lastly, privacy that enable safeguarding customers’ information.

Herington and Weaven (2009) proposed four dimensions of e-ServQual for the online banking industry: customer personal needs, organization location, user-friendliness, and efficiency. According to Jayawardhena (2004), five dimensions can represent the quality of an e-service: access, web interface, trust, attention, and credibility. Rod et al. (2009) emphasized three aspects of service quality that have been influenced by internet banking: the quality of customer service, the level of service on online information, and the quality of banking service products. Two researchers carried out research in the ASEAN region. Thaichon et al. (2014) stated that the quality of the network, customer service, information support, privacy, and security have the greatest impact on service quality. Poon (2008) emphasised ten features, including ease of use, accessibility, feature availability, management and image of the bank, security, privacy, design, content, speed, and fees. Both of these studies were carried out in Thailand and Malaysia, respectively.

Relationship between Reliability and Customer Satisfaction on Internet Banking

The element of reliability in e-service quality deals with customer perceptions towards service providers in providing the promising service reliably and dependably and providing their service on time. Jay and Barry (2014) emphasised its mechanical and product parts and its reliability aspect that requires consistency in rendering quality and performance at all times. Similarly, internet banking applies them with the reliability of their website design. Stiakakis and Georgiadis (2009) thought that the reliability aspect is considered fundamental criteria for electronic service quality. Yang and Fang (2004) expressed that the reliability aspect requires more than just relying on the machines and product, but insist that it also required instance consideration in establishing accurate records for quotations and billing.

H1: There is a significant relationship between Reliability and Customer Satisfaction on Internet Banking

Relationship between Security and Customer Satisfaction on Internet Banking

Security and data confidentiality issues have been two major factors that affect the level of customer satisfaction. The fear of information leakage is what customers fear most when performing internet banking transactions. In sustaining and being able to be competitive, banks must provide a high level of internet banking security in ensuring meeting or exceed their customer’s desires. According to Ahmad and Al-Zu’bi (2011), the aspect of security has and will in future significantly influence customer satisfaction. Customers anticipated banks can ensure their financial transaction performed through internet banking is secured.

In Malaysia, the law that governs the collection, use and disclosure of personal data by any organisation is governed by Bank Negara Malaysia under the Malaysia Personal Data Protection Act 2010 (PDPA 2010). The Act has come into full effect on 2 June 2010. It is an Act to regulate the processing of personal data in commercial transactions and to provide for matters connected therewith and incidental thereto. Henceforth, this regulation applies to the banking sectors that require personal data, information and other details of their customers and thereby necessarily required them for nature itself to perform secured business transactions and other standard procedures about the banking processes.

H2: There is a significant relationship between Security and Customer Satisfaction on Internet Banking

Relationship between Responsiveness and Customer Satisfaction on Internet Banking

Any business operation must have an effective response towards their customers. Parasuraman et al. (1985, 1988) defined responsiveness in terms of service quality (SERVQUAL), emphasising the willingness or enthusiasm of the service provider staff in attending to customers promptly.

Responsiveness may also be measured by the level of customer service or support, including before and after-sales support. Nagabhushanam (2011) noted customer service or support as an important factor to gain satisfaction from customers. This is especially important with the dynamic interactive process in online banking that requires continuous improvement by the banks as service providers.

H3: There is a significant relationship between Responsiveness and Customer Satisfaction on Internet Banking

Relationship between Information and Customer Satisfaction on Internet Banking

The information and customer satisfaction elements refer to the customer's perception towards the given information of a service provided. As explained by Jun and Chai (2001), the quality or dimension of 'information' or 'content' is defined as "information on products and services online or other information that customer needs," specifically referring to it as the category of 'online system quality' under the internet banking service quality. Saha & Zhao (2005) elaborated that the quality of information presented on the website should be easy to understand, personalised and complete for everyone. Poon (2008) in her study on users' adoption of e-banking services revealed that an estimated 70% of the customers perceived credibility of information influences e-banking usage with the assistance of a comprehensive help menu. Chen, Hsiao and Hwang (2012) on their study established that the way the information is expressed on the website is crucial in determining the level of customer satisfaction and acceptance.

H4: There is a significant relationship between Information and Customer Satisfaction on Internet Banking

Relationship between Website Design and Customer Satisfaction on Internet Banking

It is crucial to provide a reasonable quality and accepted website design to appeal to customers and gave a lasting experience which ultimately leads to customer satisfaction. Parasuraman et al. (2005), defined 'website design' as 'site aesthetics' and s the appearance of the site. Jun and Chai (2001) perfected the dimension towards e-service quality for online banking and further added it as a new dimension of aesthetics about its perception of an appealing website

that highly influences attracting customer attention. Furthermore, Muslim (2016) exerted that any bad experience encountered by customers, especially in relation to the interactive functionality of e-banking websites would render negative e-banking service quality even before the transaction took place. In rendering an acceptable and reasonably positive e-banking service quality, one should emphasise effective and efficient accessibility of their website with a suitable visual and up-to-date technology enhancement.

H5: There is a significant relationship between Website Design and Customer Satisfaction with Internet Banking

Relationship between Privacy and Customer Satisfaction on Internet Banking

According to The Star (2016), Malaysia is rated as the most vulnerable country to internet scams in this region. The top three scams are ‘work-from-home fraud’ (30%), internet auction scams (22%), and online dating scams (20%). In relation to internet banking, the fraudster can potentially steal customers’ financial information from making online purchases originating from any part of the world with internet access. This resulted in customers being reluctant in providing their personal financial information via the website.

The banking institution has committed to maintaining customers’ trust by continuously maintaining best privacy practices such as Personal Data Protection Act 2010. Jham, V. (2016) noted that perceived trustworthiness focuses on individual reputation and economic reasons. Therefore, one could conclude that the privacy issue is necessary and is closely related to customer satisfaction.

H6: There is a significant relationship between Privacy and Customer Satisfaction on Internet Banking

3. Research Methodology

A questionnaire was prepared as the primary source for data collection. Questionnaires allow respondents to answer confidentially at their own pace and at a convenient time for them. 3 sections were required to be answered. Section A asked the respondents to provide basic demographic data and their experience in online banking. Section B requires respondents to rate their level of acceptance for their e-banking service quality. C requires input regarding customer satisfaction using a five-point Likert scale.

The respondents in this study referred to customers who had experience with online purchases. A total of 200 questionnaires were distributed and out of which 163 were complete and usable. The sample ranges from 18 to 65 years old who understand English and are fluent in internet banking. The data were processed and analysed by using Statistical Package for Social Science (SPSS) software.

This study employed descriptive analysis to develop profiles of the study’s respondents. For normality analysis, Person correlation analysis and regression analysis were used to test and confirm the significant or insignificant relationship.

4. Data Analysis and Findings

Correlation analysis of the data shows the following relationship between the variables.

- i. There is significant relationship between reliability and customer satisfaction; $p = 0.00$ and high degree of strength; $r = 0.756$
- ii. There is significant relationship between security and customer satisfaction; $p = 0.00$ and high degree of strength; $r = 0.747$
- iii. There is significant relationship between responsiveness and customer satisfaction; $p = 0.00$ and high degree of strength; $r = 0.591$
- iv. There is significant relationship between information and customer satisfaction; $p = 0.00$ and high degree of strength; $r = 0.649$
- v. There is significant relationship between web design and customer satisfaction $p = 0.00$ and high degree of strength; $r = 0.815$

Table 1: Correlation Summary Result

Independent Variables	Mean	R-value	Significant Correlation
Reliability	3.9264	0.756	Yes
Security	3.6544	0.747	Yes
Responsiveness	3.5986	0.591	Yes
Information	3.5491	0.649	Yes
Web Design	3.8554	0.815	Yes

- vi. It is also found that privacy has NO positive correlation towards customer satisfaction; $p = 0.856$ and low degree of strength; $r = \text{minus}(0.14)$

We also performed a regression test to confirm whether each independent variable and dependent variable has a strong relationship between them. The analysis showed that there is a significant difference of strong relationship between independent variables: Reliability, Security and Web Design on Customer Satisfaction towards Online Banking. This is further proven by the P value and Beta (β) value stated as follows:

Firstly, reliability has a positive relationship with Customer Satisfaction with $P=0.00$ and $\beta =0.295$. Secondly, security has a positive relationship with Customer Satisfaction with $P=0.00$ and $\beta =0.231$. Thirdly, web design has a positive relationship with Customer Satisfaction with $P=0.00$ and $\beta =0.458$

Whereas, the other three (3) independent variables have no significant difference in relationship towards the dependent variable.

Responsiveness has NO relationship with Customer Satisfaction with $P=0.746$ and $\beta = (0.019)$. Next, Information has NO relationship with Customer Satisfaction with $P=0.727$ and $\beta = (0.21)$. Lastly, Privacy has NO relationship with Customer Satisfaction with $P=0.398$ and $\beta = (0.033)$.

Table 2: Regression Coefficient Results

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.524	.186		2.816	.005
Reliability	.281	.053	.295	5.253	.000
Security	.216	.056	.231	3.822	.000
Responsiveness	-.018	.056	-.019	-.325	.746
Information	.021	.061	.021	.350	.727

Privacy	-.025	.029	-.033	-.848	.398
Web_Design	.427	.060	.458	7.106	.000

5. Discussion and Conclusion

The analysis noted that the results showed significant variation from the six dimension variables used in determining the e-service quality, namely the Reliability, Security, Information, Responsiveness, Privacy and Website Design that is observable against Customer Satisfaction towards internet banking. Three out of six e-service quality dimension selected variables are shown to have an ‘excellent’ impact on customer satisfaction towards internet banking that scores above 0.9 which are; Reliability, Security and Responsiveness. However, the other three dimensions which have an ‘acceptable’ impact on customer satisfaction towards internet banking that scores around 0.7 are; Information, Website Design and Privacy.

The findings from this study will provide the respective bank management personnel to give more preference towards enhancing their service quality. In short, using them as a competitive tool in satisfying bank customers with the pretext not only for retaining their existing customers, but also to ensuring repetitive purchases.

This research may have resulted in a different outcome if it is to be conducted in other cities or regions. Future studies may also focus on industry-specific approaches such as studies on consumer electronic products, instead of focusing on a general perspective of the research subject.

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