

Impact of Service Quality on Customer Satisfaction Towards Online Banking

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Abstract: Cashless payments are becoming popular and accepted by Malaysian consumers. In the market, there are some types of cashless payment, for example, plastic cards, e-wallet, electronic transfers, and online banking. Each type of cashless payment may have its own advantages and disadvantages. Among the disadvantage of cashless payment like e-wallet is security. The purpose of this research was to study the factors of cashless payment usage among consumers in Kulai, Johor. Technology Acceptance Model (TAM) framework was used as variable factors which were perceived usefulness, perceived ease of use, perceived risk and trust, to measure factors towards cashless payment usage among consumers in Kulai, Johor. This study used an online questionnaire to collect data from respondents. 734 questionnaires were distributed to the respondents and a total of 205 sets has been returned back. The results showed that all the studied variables have a positive relationship with cashless payment usage. This research can contribute some idea to the cashless payment service provider firms to provide more customers oriented services.

Keywords: Online banking, Service quality, Customer satisfaction

1. Introduction

Online banking is a method that uses the internet to enable financial transactions to be carried out by clients (Shih & Fang, 2004). Online banking gives banking institutions and clients many advantages. According to Jayawardhena and Foley (2000) that the advantages of using online banking include cost savings and efficiency. Furthermore, benefits to customers including checking of balance accounts, payment of a bill, and transfers of money available 24 hours. The consumer can check on accounts balance or perform other activities at any time through online banking (Shih & Fang, 2004). This ease of access allows to helps the business or particular client to prevent any delays or failure in their transaction. Moreover, it will help to save time, enjoyable, useful and convenient. The banking channel is a simple and reliable way to handle bank accounts from a customer's point of view since it can be reached from any 24 hours a day, 365 days a year without visiting a bank branch.

1.1 Research Background

On 1 June 2000, the Central Bank of Malaysia has approved local commercial banks to offer online banking services (Suganthi *et al.*, 2001). Maybank is the largest domestic bank in Malaysia and was the first to offer this service at www.maybank2U.com. According to Aliyu *et al.* (2014) that online banking is a system provided by a bank to clients are able to access the account detail and manage banking accounts or transaction through the internet. Due to the development in communication technology and the expansion of the different smart device, online banking in Malaysia also has expanded rapidly (Kijang, 2016). The research reveals that consumer is rapidly making an online transaction using cell phones. Consumers are increasingly using mobile phones to conduct online transaction. According to the Asian Institute of Finance showed that online banking in Malaysia has is growing rapidly because of the growth of internet penetration (Kijang, 2016). The increase of internet users is another factor in the growth of internet banking. It will provide opportunities for a bank to develop its service by attracting a new customer.

1.2 Problem Statements

The satisfaction of customers plays an important role in remaining competitive in the banking sector (Parasuraman & Zeithaml, 2005). This is because a higher degree of customer satisfaction can help the bank to attract more customers. With a lower level of customer satisfaction, the business will fail (Parasuraman &, Zeithaml, 2005).

The Malaysia Communication and Multimedia Commission (MCMC) Quarter 4 the Year 2018 Report shows that more internet users using online banking for their financial activities. The users used the online banking system to increase from 41.7% in 2016 to 54.2 % in 2018 (MCMC, 2018). However, the MCMC report also show has almost half (45.8%) of people did not use online banking (MCMC, 2018).

Report of Bank Negara Malaysia shows that users and subscribers for internet banking have increased in a recent month before the Covid-19 lockdown period (Kanagaraju, 2020) The number of internet banking subscribers increased from 30.8 million in January 2020 to 33.6 million in July 2020 (Kanagaraju, 2020). According to Bank Negara Malaysia stated that 77% of Malaysians look forward to using online banking, but 36% of Malaysian will continue to trust natural traditional banks to protect their data and funds. According to Afandi, 2018 stated that almost 46% of Malaysian consumers feel unsafe with the security-related online banking system. The report also found almost 70% of Malaysian clients prefer to use the ATM or cash (Afandi, 2018). Once the disclosure of data or information happens, a consumer may lose confidence in using online banking. Customer will feel that the bank has failed to protect their privacy (Aliyu *et al.*, 2014). According to Chong *et al.*, (2015) has many clients still thinks that security problems are the key reason why they do not use online banking. According to (Tat *et al.*, 2008) stated that there are many researchers focused on various factor affect online banking. The most important factor influencing online banking is trust and trust plays is a vital role in increasing the number of clients using online banking.

According to the MCMC report found that 34.5% of people lack confidence or skill to use the online banking system (MCMC, 2018). Besides, several studies have found that online banking still lacks knowledge of the online banking service and offer to users as well as how can consumer can be used (Yen *et al.*, 2016).

1.3 Research Questions

- (i) What is the relationship between SQ dimension namely Responsiveness, Trust, Convenience, Efficiency and Security influencing customer satisfaction towards online banking?
- (ii) What is the most influential SQ dimension affect the customer satisfaction towards online banking?

1.4 Research Objectives

- (i) To determine relationship between SQ dimension namely Responsiveness, Trust, Convenience, Efficiency and Security) influencing customer satisfaction in online banking.
- (ii) To identify the most influential SQ dimension affect customer satisfaction.

1.5 Scope of the Study

This section should include the significance of the study. In this research, 262 survey questionnaires were collected from the respondents. The online questionnaire was distributed to those who have experienced using online banking and aged 18 and above in Batu Pahat. This research used online questionnaire data. This research study was performed using a deductive approach using a quantitative method. The respondents were selected through non-random sampling. The data analysis was used SPSS software. In this study, descriptive research was used to determine the effect of customer loyalty on online banking such as Alliance Bank, CIMB, Hong Leong Bank Maybank, Public Bank, RHB Bank and Standard Chartered Bank in Batu Pahat, Johor.

1.6 Significance of the Study

The significance of this analysis is to provide the banks with the effect of SQ on customer's satisfaction with online banking. In this study, the researcher is investigating the relationship between the SQ dimension affect customers' satisfaction in online banking in Batu Pahat, Johor. This study helps financial institutions to develop and enhance their service in online banking. The study allows the bank institutions to more changes and improvement based on the recommendation in this study. The findings are beneficial as banks identify and appreciate the needs of consumers for future decision making.

2. Literature Review

2.1 Online Banking

According to Han *et al.* (2004) that online banking is easier and convenient. Customer can access their account from anywhere and anytime through the internet. Many banks provide office channels to helps customer cannot access online banking. Nowadays, online banking is more common. Online banking can pay bills online, checking account traction, online shopping, transaction money and others. Online banking makes financial life to more easily. Using online banking can cost reduce, increase customer loyalty and attract new customer.

Mohamad *et al.* (2010) found out that almost 50% of clients change from traditional banking to online banking because use online banking provides more usefulness and convenience to clients. Auta (2010) examines that e-banking provides convenience such as easy to transfer money, transfer money quickly, saving time to transfer money influenced to satisfaction of the customer is using the banking system. Lichtenstein (2006) examines that factors affect the consumer decision in online banking and that found the main motivation is convenience.

According to Tat *et al.* (2008) stated that there are many researchers focused on various factor affect online banking. The most important factor influencing online banking is trust and trust playing an important role in increasing the number of clients using online banking. Wong *et al.* (2009) stated that the factor of perceived risk in transacting online banking will affect whether customers are willing to use online banking. The perceived risk has a direct positive correlation effect on the clients' use of online banking.

2.2 Customer Satisfaction

According to Armstrong and Kotler (1996) define that customer satisfaction is well-known. Concept of customer satisfaction established in marketing, consumer research, welfare and general economics. Satisfaction is based on the customer's feeling from the expectation of service and what was service received.

Satisfaction is the appraisal of a service or product by consumers in terms of the product or service satisfying the needs and desires of customers (Bitner & Zeithaml 2003). According to Al-jazzazi & Sultan (2017) stated that customer satisfaction is measures the performance of an organization based on the customer or consumer's needs. Furthermore, measurement of customer satisfaction can according to comment on product or service from the customer. In the marketplace, product and service quality is important to the organization.

2.3 Service Quality

Han *et al.* (2004) stated that SQ is a tool that used to build a competitive advantage in the company. Service quality has been undertaken in the last 20 years. Service quality is an important success factor for companies to develop, compete with another company in the market (Angelova & Zekiri, 2011). The organization have been aware of SQ bring a sustainable and competitive advantage. Service quality has become a measure to which service that meets customer's expectation.

2.4 Service Quality Dimension

Most researchers identify that SQ is important for customer satisfaction (Parasuraman *et al.*, 1988). SQ and customer satisfaction are recognized as an important factor in internet banking (Arega, 2017). The SERVQUAL is a model to measure the difference between customer expectations and customer perception (Parasuraman *et al.*, 1988). There are ten dimensions in SERVQUAL includes reliability, tangibles, responsiveness, courtesy, credibility, competence, access, security, communication and understanding customer satisfaction. Many studies have employed the SERVQUAL model to measure the SQ in internet banking (Panjami *et al.*, 2019). The extended SERVQUAL model by Vetrivel *et al.*, (2019) is appropriate for this study, thus the extended model by Vetrivel *et al.*, (2019) is adopted the proposed model.

(a) Responsiveness

Felix (2017) stated that responsiveness is provided assistance and speedy service to the customer. Responsiveness is being delivery service with fast and correct information to customer. Responsiveness has also defined the speed and timeliness of service delivery. It will employees to provide service with willingness. The responsiveness is fulfilling customer's needs that match customers' expectation (Felix, 2017). Responsiveness is employees are willing to help the customer and provide service (Ejigu, 2016). According to the above statement, a researcher can state that the responsiveness component of SQ has a strong influence on customer loyalty in internet banking (Kant & Jaiswal, 2017; Banerjee & Sah, 2012; Vetrivel *et al.*, 2019).

H1: Responsiveness has a significant on customer satisfaction.

(b) Trust

Trust is a close relationship with security and system integrity. Trust can affect customer and a willingness to disclose personal information when making a purchase online (Madu & Madu, 2002). Trust is individual belief in the security and privacy of the online banking system. Trust also can define the customer perception of reliability and security towards the online banking system (Eriksson *et al.*, 2005).

Grabner-Kräuter and Faullant (2008) explain that trust is a role that affects the usage of the customer in online banking. The factor influences trust is the security of the online system. One of recommended that banks should improve and enhance the system security to increases consumer trust in the online system.

Many researchers found that the most significant determinant of customer satisfaction is trust (Pavlou & Fygenon, 2006; Ribbink *et al.*, 2004; Kim *et al.*, 2008). This research explores the trust that impacts customer satisfaction. Ribbink *et al.* (2004) explain that customer satisfaction very close to interpersonal trust. The position effect of customer satisfaction on trust can be predicted in the online environment.

H2: Trust has a significant on customer satisfaction.

(c) *Convenience*

According to Massilamany and Nadarajan (2017) that customers are always looking for convenience to handle their financial transfers and checking accounts. Singhal and Padhmanabhan (2009) stated that many people use online banking because it is very convenient and flexible. Munusamy (2012) stated that customers are willing to change to another banking method that provides higher convenience. Online banking can be given customer settled of financial transaction or checking account balance everywhere and anytime. This system provides the customer with life become easier and convenient.

According to Massilamany and Nadarajan (2017), that correlation between convenience and customer satisfaction has a positive relationship influence on satisfaction. Customer will considerations a more convenient banking method.

H3: Convenience has a significant on customer satisfaction.

(d) *Efficiency*

Efficiency is the ability of customer ability to get the websites, find product or information, and check out with minimum effort (Zarei, 2010). According to Parasuraman and Zeithaml (2005) stated that efficiency refers to the proper working of the websites. Customers can easily use and can *get all* information on the websites Efficiency is the most influential SQ in websites quality measurement. The efficiency evaluation is based on it takes to complete the task, the cost of retrieving electronic service, and the quality of service provided (Hizam & Ahmed, 2019).

According to Vetrivel *et al.* (2019) stated that relationship between efficiency has a significant positive influence on customer satisfaction. Many studies found that efficiency has a direct relationship with customer satisfaction (Bouketir & Hassani, 2017; Hammoud *et al.*, 2018; Salihu & Metin 2017).

H4: Efficiency has a significant on customer satisfaction.

(e) *Security*

Dixit and Datta (2010) explained that security may define a form to protect customer information and avoid hackers steal information or data on customers' privacy. Besides, privacy is important to customers for protection on financial information when they transfer fund through online banking. According to Goh (2016), the security of online banking plays an important role for customers in the banking sector. Fatima (2011) stated that the security of a financial transaction is the main concern for the customers to protect their money in the banks.

Ahmad and Al-Zu'bi (2011) stated that security has an important significant effect on customer satisfaction. The intimate that customer's willingness use online banking to transfer fund dependent

on trust. If the customers trust the privacy protection by the bank, they will be established for a long-time relationship with the bank.

H5: Security has a significant on customer satisfaction.

2.5 Conceptual Framework

Based on the previous subheading, it could be obtained through the high level of customers' satisfaction towards online banking. For this study, five dimensions which consist of responsiveness, trust, convenience, efficiency and security were employed to gauge the customers' satisfaction (Vetrivel *et al.*, 2019).

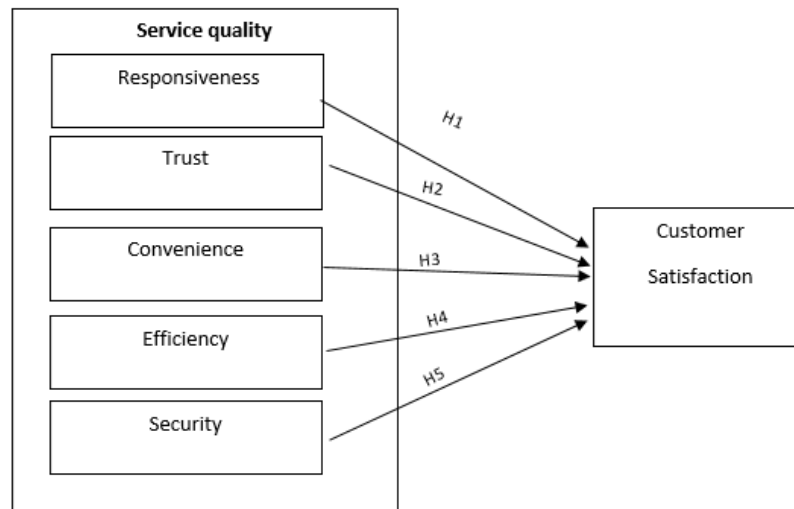


Figure 1: The conceptual framework on Impact of service quality on customer satisfaction towards online banking. Adopted from Vetrivel *et al.* (2019)

From the discussion of the framework, has 5 hypotheses are tested with the relationship between 5 IV and DV. There are 5 hypotheses guiding in this study:

H1: Responsiveness has significant relationship and customer satisfaction.

H2: Trust has a significant relationship and customer satisfaction.

H3: Convenience has a significant relationship and customer satisfaction.

H4: Efficiency has a significant relationship and customer satisfaction.

H5: Security has a significant relationship and customer satisfaction.

3. Research Methodology

3.1 Research Design

Quantitative research is a method used to collect data. Quantitative research can define the impact between independent variables and dependent variable in this study. Descriptive research can make the presentation of data easier for readers to understand. In this research, descriptive research was used to identify the impact of SQ dimension (namely responsiveness, trust, convenience, efficiency and security) influenced customer satisfaction towards online banking.

3.2 Data Collection

In this study, the researcher was used primary data. The data was collected through online questionnaires. The survey was posted using the Google Survey Form online and shared on various social media such as Whatapp, FB, Wechat and other social media.

3.3 Population and Sampling Techniques

In this study, the target population is the Batu Pahat, Johor. The questionnaire was distributed to respondents who have experienced using online banking system by Malaysian commercial banks and aged 18 above in Batu Pahat, Johor. The respondents were select in the study, respondents who have a bank account in commercial banks such as Alliance Bank, CIMB, Hong Leong Bank Maybank, Public Bank, RHB Bank and Standard Chartered Bank. In this study, the samples sizes are 262. In this study, the non-random sampling. Convenience sampling was a method to enable the researcher to complete a large number of the questionnaire. Convenient sampling has been employed.

3.4 Pilot Test

The pilot test was carried out before the online questionnaire was distributed to the respondents. Moreover, the researcher was able to collect some valuable opinion to design questionnaires from the target respondent. The set of online questionnaires were distributed through such as WhatsApp's, FB, WeChat and other social media. The questionnaire was divided into three sections. A total of 30 questionnaires collected by respondents.

Table 1 shows the result of Cronbach's Alpha is between 0.787 to 0.910. Most variables such as security, responsiveness, trust, efficiency and convenience have excellent reliability because of the result for Cronbach's Alpha between 0.8 to 0.9.

Table 1: Pilot test

| Variables | Construct | Cronbach's Alpha | Number of Items |
|-----------|-----------------------|------------------|-----------------|
| IV 1 | Responsiveness | 0.876 | 4 |
| IV 2 | Trust | 0.852 | 4 |
| IV 3 | Convenience | 0.832 | 4 |
| IV 4 | Efficiency | 0.842 | 4 |
| IV 5 | Security | 0.910 | 4 |
| DV | Customer satisfaction | 0.787 | 4 |

3.5 Constructs Measurement

The nominal was used in Section A. Section B and Section C was used the interval scale to identify the mean, percentage and standard deviation. Likert scale was used to identify results of response from strongly disagree until strongly agree in Section B and Section C. In this research, research use 5-point Likert Scale. Section A includes 8 items which gender, age, races, education, income per month, frequencies of using online banking, frequently used banks and purpose of using online banking. Section B consists questionnaire about the independent variable (responsiveness, trust, convenience, efficiency and security). Section C consists questionnaire regarding customer satisfaction.

3.6 Data Analysis

In this research, the IBM Statistical Package for Social Sciences was used to analyze the data of research questions. The results were used to justify the five hypotheses in this research. Descriptive analysis was used to analyze in the form of mean, percentage and standard deviation. In this study, the

comparison and test hypotheses were used for Spearman's correlation. Moreover, the description analysis, scale measurement and inferential analysis were used in this study.

4. Results and Discussion

4.1 Respondent Demographic Profile

The majority of the respondents were female which consists of 61.8% and followed by male consisting of 38.2% respondents. Moreover, most of the respondents were in the age range of 18-24 years old which consists of 48.9%, 25-30 years old which is 35.1%, 11.1% were age range 31-35 years old, 3.4% were an aged range of 36-40 years old and the least of age group was 41 and above, which only has 1.5%.

The respondents consisted of Chinese which was 53.1% and followed by Malay which consisted 37.0%, races of India which consisted 7.3% and lastly is other which is only 2.7% respondents have a level of education for secondary school which is 46.9% by following the Bachelor's degree which consists 34.7%. The level of education Pre-university or Diploma has 16.8%. The lowest amount respondent has the education level of Master's degree which consisted 1.5%.

The respondent income between RM 2001- RM 3000 per month have 46.6%. For the income between RM 1001- RM 2000 per month and income between RM 3001- RM4000 per month which consisted 20.2% and 20.6% respectively. Moreover, the respondents with income between RM 4001 and above per month have 9.2%. The minority respondents with income under RM 1000 per month has 3.4%. Moreover, respondents who used online banking 2 - 4 times a month occupied 75.2%. Moreover, the respondents who used online banking about 5 - 8 times a month and once a month are 25 respondents (9.5%) and 33 respondents (12.6%) respectively. The minority respondents who used online banking more than 8 times a month have 7 respondents (2.7%).

The frequently used conventional banks, the highest frequency is Maybank which is 55%, followed by CIMB Bank has 19.8%, Public Bank has 8.4%, and RHB Bank has 18 respondents 6.9%. Moreover, Hong Leong Bank and Standard Chartered Bank have 6.1% and 2.3% respectively. For lowest frequency is Alliance Bank which is only 1.5%.

Most of the respondent use online banking for the purpose of paying the bills which consists of 60.7% followed by 26.3% that use online banking to transfer money between accounts and 12.6% of respondents to check their bank account. The least number of respondents use to applying for a loan only consists of 0.4%. The result of this study is listed in Appendix A.

4.2 Scale Measurement

(a) *Internal Reliability Test*

Table 2 shows that the result of Cronbach's Alpha for IV and DV which are responsiveness, trust, convenience, efficiency, security and customer satisfaction. In this study, reliability was tested by measuring the 24 items. In Table 1, the variables of convenience consist of the highest number which 0.939 followed by efficiency are obtained at 0.933. Moreover, customer satisfaction was achieved the lowest value of Cronbach's Alpha which is 0.882. On the other hand, customer satisfaction, security and trust have 0.915, 0.917 and 0.924 respectively. Based on the result, all independent variable and dependent variable have excellent reliability because the value has exceeded 0.8 and above.

Table 2: Reliability test

| Variables | Construct | Cronbach's Alpha | Number of Items |
|-----------|-----------------------|------------------|-----------------|
| IV 1 | Responsiveness | 0.882 | 4 |
| IV 2 | Trust | 0.924 | 4 |
| IV 3 | Convenience | 0.939 | 4 |
| IV 4 | Efficiency | 0.933 | 4 |
| IV 5 | Security | 0.917 | 4 |
| DV | Customer satisfaction | 0.915 | 4 |

(b) Normality Test

Table 3 shows that the Kolmogorov-Smirnov test data was used in this study. The Shapiro-Wilk test used for respondents more than 50. The result of the normality test is non-normal because the critical value is less than 0.05. The normal data must get more than 0.05.

Table 3: Test of Normality

| | Kolmogorov-Smirnov ^a | | |
|-----------------------|---------------------------------|-----|------|
| | Statistic | df | Sig. |
| Responsiveness | 0.172 | 262 | .000 |
| Trust | 0.217 | 262 | .000 |
| Convenience | 0.194 | 262 | .000 |
| Efficiency | 0.263 | 262 | .000 |
| Security | 0.211 | 262 | .000 |
| Customer satisfaction | 0.290 | 262 | .000 |

4.3 Hypotheses Testing

Variable of convenience is having the strongest positive relationship on customer satisfaction (value of coefficient 0.664) followed by efficiency (value of coefficient 0.609), security (value of coefficient 0.587). Both variables of responsiveness are moderate positive relationship with customer satisfaction (same value of coefficient 0.480).

Table 4: Spearman's correlation coefficient value

| Variables | RE | TR | CV | EF | SE | CS |
|-----------|---------------|---------------|---------------|---------------|---------------|--------------|
| RE | 1.000 | | | | | |
| TR | .587** | 1.000 | | | | |
| CV | .465** | .527** | 1.000 | | | |
| EF | .385** | .478** | .635** | 1.000 | | |
| SE | .517** | .420** | .540** | .570** | 1.000 | |
| CS | .480** | .482** | .664** | .609** | .587** | 1.000 |

RE= Responsiveness, TR= Trust, CV= Convenience, EF= Efficiency, SE= Security and CS= Customer satisfaction

4.4 Major Finding

(a) Responsiveness

For hypothesis, the P-value is 0.000 and less than 0.05 at the significance of 5%. As a result, the researcher indicated H_0 is rejected and accepted H_1 . The result of this study is listed in Appendix B.

H₀: There is no significant relationship between responsiveness with customer satisfaction towards Online Banking.

H₁ : There is significant relationship between responsiveness with customer satisfaction towards Online Banking.

(b) Trust

From the result, research indicated that there is a significant positive relationship between trust and customer satisfaction. In consequently, acceptable for H₁ and rejected H₀. The result of this study is listed in Appendix B.

H₀: There is no significant relationship between trust and customer satisfaction towards Online Banking.

H₁ : There is significant relationship between trust and customer satisfaction towards Online Banking.

(c) Convenience

The P-value in the hypothesis is 0.000. From the result, research indicated that there is a significant positive correlation between trust and customer satisfaction. Consequently, acceptable for H₁ and rejected H₀ when the value is less than 0.05. The result of this study is listed in Appendix B.

H₀: There is no significant relationship between convenience and customer satisfaction towards Online Banking.

H₁ : There is significant relationship between convenience and customer satisfaction towards Online Banking.

(d) Efficiency

For hypothesis, the P-value is 0.000 and less than 0.05 at the significance of 5%. In conclusion, the researcher accepted the hypothesis of H₁ and rejected H₀. The result of this study is listed in Appendix B.

H₀: There is no significant relationship between efficiency and customer satisfaction towards Online Banking.

H₁ : There is significant relationship between efficiency and customer satisfaction towards Online Banking.

(e) Security

The P-value is 0.000 for this hypothesis which is less than 0.05 at the significance level of 5%. Thus, there is a positive relationship between security and customer satisfaction and acceptable H₁ and rejected H₀. The result of this study is listed in Appendix B.

H₀: There is no significant relationship between security and customer satisfaction towards Online Banking.

H₁ : There is significant relationship between security and customer satisfaction towards Online Banking.

4.5 Discussion

(a) Objective 1

This objective is to determine the relationship between service quality dimension which is responsiveness, trust, convenience, efficiency and security and customer satisfaction.

The result findings indicate that responsiveness is a positive significant correlation with customer satisfaction towards online banking since the value of P is 0.000 (< 0.05). The result is based on the table in Appendix B. Thus, it can be concluded that responsiveness is significant. The outcome was aligned with prior studies by previous researchers (Ejigu, 2016; Kant & Jaiswal, 2017; Banerjee & Sah, 2012; Vetrivel *et al.*, 2019; Pasha & Razashah, 2018).

The result indicates that the correlation between trust and customer satisfaction has a P-value of 0.000 (less than 0.05). The research finding shows that trust and customer satisfaction has a significant and positive relationship with customer satisfaction in online banking. The result is based on table 4.2 in the appendix. The research finding indicates that trust and customer satisfaction has a significant and positive relationship with customer satisfaction towards online banking (Vetrivel *et al.*, 2019; Sayed & Moghadam, 2015; Lee & Lin, 2005).

The result in this paper illustrates that the correlation between convenience and customer satisfaction has a P-value is 0.000 and less than 0.05. The research finding illustrates that convenience has a significant and positive correlation with customer satisfaction in online banking. The results in Appendix B shows the contradicting with some studies (Hammoud *et al.*, 2018; Khazaei *et al.*, 2014; Ahmad & Al-Zu'bi, 2014; Goh *et al.*, 2016).

According to the research finding, a significant and positive correlation between efficiency and customer satisfaction. It is because the P-value is 0.000 (< 0.05). The result is based on table 4.2 in the appendix. This result aligned with the previous studies (Hammoud *et al.*, 2018; Vetrivel *et al.*, 2019; Chang *et al.*, 2017; Salihu & Metin, 2017).

Lastly, the relationship between security and customer satisfaction has a P-value of 0.000 (< 0.05). The result findings indicate that security is a significant and positive relationship with customer satisfaction in online banking. The result is based on table 4.2 in the appendix. Furthermore, this result aligned with the reported studies (Hammoud *et al.*, 2018; Ahmad & Al-Zu'bi, 2014; Saha, 2016).

(b) Objective 2

In this research, Spearman's correlation analysis is to determine the most influential SQ dimensions such as responsiveness, trust, convenience, efficiency and security that affect customer satisfaction in online banking. Based on Appendix B, the independent variable of convenience plays a vital role and has the strongest positive relationship with customer satisfaction (value of coefficient 0.664) among five independent variables in this study. In this study, the researcher found that the independent variable of responsiveness needs to improve because the value of the coefficient is weakest which consisted of 0.480.

5. Conclusion

In conclusion, all of the objectives of this research were achieved. This research identified that five independent variables were significant to influence the DV (customer satisfaction). In this study, the result of Kolmogorov Smirnov indicates that the study is non-normal because the significant value of all of the independent variable was less than 0.005. Spearman's correlation was used to identify the most influential factor that affects customer satisfaction in objective. By referring to all of the independent variable (Responsiveness, Trust, Convenience, Efficiency and Security) have a positive relationship with the DV since the value for $P < 0.000$. Convenience has the most significant and strong relationship with customer satisfaction whereas responsiveness is the weakest. The empirical results show that in the banking industry there is a significant relationship between online banking SQ dimensions and customer satisfaction. An overview of the factor in the study helps bank manager and

policymakers to more successfully and more efficient to improve the bank sector in long run and enable new consumers to accept online banking.

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Appendix A: Respondent demographic profile

| Gender | Frequency | Percent % |
|---|-----------|-----------|
| Male | 100 | 38.2 |
| Female | 162 | 61.8 |
| Age | | |
| 18-24 | 128 | 48.9 |
| 25-30 | 92 | 35.1 |
| 31-35 | 29 | 11.1 |
| 36-40 | 9 | 3.4 |
| 41 and above | 4 | 1.5 |
| Races | | |
| Malay | 97 | 37.0 |
| Chinese | 139 | 53.1 |
| Indian | 19 | 7.3 |
| Other | 7 | 2.7 |
| Education | | |
| Secondary School | 123 | 46.9 |
| Pre-University/ Diploma | 44 | 16.8 |
| Bachelor Degree | 91 | 34.7 |
| Master | 4 | 1.5 |
| Income | | |
| Under RM 1000 | 9 | 3.4 |
| RM 1001- RM 2000 | 53 | 20.2 |
| RM 2001- RM 3000 | 122 | 46.6 |
| RM 3001- RM4000 | 54 | 20.6 |
| RM 4001 and above | 24 | 9.2 |
| Frequencies of online banking usage | | |
| Once a month | 33 | 12.6 |
| 2 - 4 times a month | 197 | 75.2 |
| 5 - 8 times a month | 25 | 9.5 |
| More than 8 times a month | 7 | 2.7 |
| Frequently used banks. | | |
| Alliance Bank | 4 | 1.5 |
| Cimb Bank | 52 | 19.8 |
| Hong Leong Bank | 16 | 6.1 |
| Maybank | 144 | 55.0 |
| Public Bank | 22 | 8.4 |
| Rhb Bank | 18 | 6.9 |
| Standard Chartered Bank | 6 | 2.3 |
| Frequency of respondents based on purpose of using online banking. | | |
| Pay the bills | 159 | 60.7 |
| Check the account | 33 | 12.6 |
| Transfer money between accounts | 69 | 26.3 |
| Applying for loan | 1 | 0.4 |

Appendix B: Correlation all of independent variable and Customer Satisfaction towards Online Banking

| | | | RE | TR | CV | EF | SE | CS |
|----------------|----|-------------------------|--------|--------|--------|--------|--------|--------|
| Spearman's rho | RE | Correlation Coefficient | 1.000 | .372** | .465** | .385** | .517** | .480** |
| | | Sig. (2-tailed) | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | | N | 262 | 262 | 262 | 262 | 262 | 262 |
| | TR | Correlation Coefficient | .372** | 1.000 | .527** | .478** | .420** | .482** |
| | | Sig. (2-tailed) | 0.000 | | 0.000 | 0.000 | 0.000 | 0.000 |
| | | N | 262 | 262 | 262 | 262 | 262 | 262 |
| | CV | Correlation Coefficient | .465** | .527** | 1.000 | .635** | .540** | .664** |
| | | Sig. (2-tailed) | 0.000 | 0.000 | | 0.000 | 0.000 | 0.000 |
| | | N | 262 | 262 | 262 | 262 | 262 | 262 |
| | EF | Correlation Coefficient | .385** | .478** | .635** | 1.000 | .570** | .609** |
| | | Sig. (2-tailed) | 0.000 | 0.000 | 0.000 | | 0.000 | 0.000 |
| | | N | 262 | 262 | 262 | 262 | 262 | 262 |
| | SE | Correlation Coefficient | .517** | .420** | .540** | .570** | 1.000 | .587** |
| | | Sig. (2-tailed) | 0.000 | 0.000 | 0.000 | 0.000 | | 0.000 |
| | | N | 262 | 262 | 262 | 262 | 262 | 262 |
| | CS | Correlation Coefficient | .480** | .482** | .664** | .609** | .587** | 1.000 |
| | | Sig. (2-tailed) | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| | | N | 262 | 262 | 262 | 262 | 262 | 262 |