

**DETERMINANT OF ONLINE SERVICE QUALITY TOWARDS CONSUMER  
ADOPTION OF ONLINE BANKING IN MALAYSIA**

**NG JI JIE**

**UNIVERSITI TEKNIKAL MALAYSIA MELAKA**

## APPROVAL

“I hereby declare that I have read this thesis and in my opinion this thesis is sufficient in term of scope and quality for the award of the Degree of Technology Management (High Technology Marketing)”

Signature : .....

Name of Supervisor : DATIN SURAYA BINTI AHMAD

Date : .....

Signature : .....

Name of Panel : Dr. ISMI RAJIANI

Date : .....

DETERMINANT OF ONLINE SERVICE QUALITY TOWARDS CONSUMER  
ADOPTION OF ONLINE BANKING IN MALAYSIA

NG JI JIE

A project report submitted in fulfillment of the requirement for the award of Bachelor  
Technology Management (High Technology Marketing)

Faculty of Technology Management and Technopreneurship (FPTT)

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

JUNE 2016

## DECLARATION

“I declare that thesis entitle “Determinant of online service quality towards consumer adoption of online banking in Malaysia” is the result of my own research except as cited in the references”

Signature : .....

Name : NG JI JIE

Date : .....

## DEDICATION

I would like to dedicate this thesis to my lovely parents, Mr. Ng Say Oon and Mrs. Tay Ching Ha. There is no doubt in my mind that without their continued support and counsel I could not have completed this process.

## ACKNOWLEDGEMENT

This final year project report was prepared for Faculty of Technology Management and Technopreneurship, Universiti Teknikal Malaysia Melaka (UTeM), basically for student in final year to complete the undergraduate program that leads to degree of Bachelor Technology Management (High Technology Marketing). This report is based on the methods given by the university.

Firstly, I would like to express my deepest thanks to Datin Suraya Binti Ahmad, a senior lecturer at Faculty of Technology Management and Tehnopreneurship, UTeM as my supervisor who had guided be a lot of task during semester's session 2015/2016. I also want to thanks Dr. Ismi Rajiani, lecturer of Research Method subject for the cooperation during I complete the final year project that had given valuable information, suggestions and guidance in the compilation and preparation this final year project report.

Deepest thanks and appreciation to my parents, family, special mate of mine, and others for their cooperation, encouragement, constructive suggestion and full of support for the report completion, from the beginning till the end. Also thanks to all of my friends and everyone, those have been contributed by supporting my work and help myself during the final year project progress till it is fully completed.

## ABSTRACT

Consumer adoption with the services provide in a firm was often look as the key to a firm's success and long-term competitiveness. In the aspect of relationship marketing, consumer adoption was often viewed as a central determinant of customer retention. The important of this research was to ensure that bank institutions provides the best services to their customers. Besides that, the research was also carried out to get the view what are the services that needed by the online banking user to be implement by the bank institutions. The research objectives is to determine the online service quality towards consumer adoption of online banking in Malaysia. In this research, data was collected through questionnaire, research strategy was survey with total 150 respondents and the analysis is carrying out using Statistical Package for Social Sciences (SPSS) and Microsoft Excel. From the result, it was proved that bank institutions provides good service to their customer. Data about consumers help bank institutions to define the need and identify the opportunities and threats for a service. Customer response was ultimate test of whether a service strategy will succeed.

## ABSTRAK

*Penerimaan pengguna mengenai servis yang disediakan dalam syarikat dilihat sebagai kunci kejayaan sesebuah syarikat dan berdaya saing. Dalam aspek hubungan pemasaran, penerimaan pengguna selalunya dilihat sebagai penentu kepada kesetiaan pelanggan. Kepentingan kajian ini adalah untuk memastikan Syarikat Bank menyediakan servis terbaik kepada pelanggannya. Selain itu, kajian ini juga dijalankan untuk mendapatkan pandangan apakah servis yang diperlukan oleh pelanggan bank untuk dilaksanakan oleh Syarikat Bank. Objektif kajian ini adalah untuk menerangkan kualiti perkhidmatan dalam talian terhadap penerimaan pengguna di Malaysia perbankan dalam talian. Dalam kajian ini, data dikumpul melalui questionnaire, strategi kajian adalah survey dengan responden berjumlah 150 dan analisis dijalankan menggunakan Statistical Package for Social Science (SPSS) dan Microsoft Excel. Daripada hasil kajian, adalah terbukti bahawa Syarikat Bank menyediakan servis yang baik kepada pelanggannya. Data mengenai pengguna membantu organisasi untuk menentukan keperluan dan kenal pasti ancaman dan peluang kepada servis. Respon daripada pelanggan adalah ujian muktamad sama ada servis itu akan berjaya.*



## TABLE OF CONTENTS

CHAPTER	CONTENTS	PAGE
	<b>DECLARATION</b>	<b>ii</b>
	<b>DEDICATION</b>	<b>iii</b>
	<b>ACKNOWLEDGEMENT</b>	<b>iv</b>
	<b>ABSTACT</b>	<b>v</b>
	<b>ABSTRAK</b>	<b>vi</b>
	<b>TABLE OF CONTENTS</b>	<b>vii</b>
	<b>LIST OF TABLES</b>	<b>xii</b>
	<b>LIST OF FIGURES</b>	<b>xiv</b>
	<b>LIST OF ABBREVIATIONS AND SYMBOLS</b>	<b>xv</b>
	<b>LIST OF APPENDICES</b>	<b>xvi</b>
 <b>CHAPTER 1</b>	 <b>INTRODUCTION</b>	
	1.1 Background of Study	1
	1.2 Problem Statement	2
	1.3 Research Questions	3
	1.4 Research Objectives	4
	1.5 Scope and Limitation	4
	1.5.1 Scope	4

1.5.2	Limitation	5
1.6	Significance of Study	6
1.7	Summary	7
1.8	Flowchart by chapter	8
<b>CHAPTER 2</b>	<b>LITERATURE REVIEW</b>	
2.1	Introduction	9
2.2	Consumer Adoption	10
2.2.1	Consumer Adoption Process	10
2.2.2	UTAUT Model	12
2.3	Service Quality	13
2.3.1	Definitions of Service Quality	13
2.3.2	Traditional Service Quality	14
2.3.3	Online Service Quality	15
2.4	Online Banking	16
2.4.1	Definitions of Online Banking	17
2.4.2	Online Banking in Malaysia	18
2.5	Service Quality in Banking Industry	18
2.5.1	Service Quality in Traditional Banking	18
2.5.2	Service Quality in Online Banking	19
2.6	Theoretical Framework	20
2.7	Hypothesis	21
2.8	Summary	22

<b>CHAPTER 3</b>	<b>RESEARCH METHOD</b>	
3.1	Introduction	23
3.2	Research Design	24
3.3	Methodological Choices	25
3.4	Primary Data Sources and Secondary Data Sources	26
	3.4.1 Primary Data Sources	26
	3.4.2 Secondary Data Sources	26
3.5	Research Strategy	27
	3.5.1 Sampling Method	28
	3.5.2 Questionnaire Structure	28
	3.5.3 Pilot Testing	30
3.6	Time Horizon	30
3.7	Location of Research	31
3.8	Operation Variable Definition	32
3.9	Analysis Technique	33
	3.9.1 Statistical Package for Social Science (SPSS)	33
	3.9.2 Pearson's Correlation Coefficient	34
	3.9.3 Multiple Regressions	34
3.10	Reliability Test	35
3.11	Validity Test	38
3.12	Summary	39

<b>CHAPTER 4</b>	<b>DATA ANALYSIS AND DISCUSSION</b>	
4.1	Introduction	40
4.2	Pilot Test	40
4.3	Reliability Analysis	42
4.4	Descriptive Analysis	43
4.4.1	Respondents Demographic Analysis	43
4.4.1.1	Gender	43
4.4.1.2	Age	44
4.4.1.3	Academic Level	45
4.4.1.4	Income	46
4.4.1.5	Occupation	47
4.4.2	Research Questions	48
4.4.2.1	Reliability	49
4.4.2.2	Responsiveness	50
4.4.2.3	Fulfillment	52
4.4.2.4	Privacy	54
4.4.2.5	Consumer Adoption	55
4.5	Inferential Analysis	57
4.5.1	Pearson Correlation Analysis	57
4.5.2	Multiple Regressions Analysis	58
4.5.3	Hypothesis Testing	61
4.6	Discussion	63
4.7	Summary	64

<b>CHAPTER 5</b>	<b>CONCLUSION</b>	
5.1	Introduction	65
5.2	Implication of Study	65
5.3	Limitation of Study	67
5.4	Recommendation for Future Research	68
	<b>REFERENCES</b>	<b>69</b>
	<b>APPENDIX</b>	<b>75</b>

## LIST OF TABLES

<b>Table</b>	<b>Title</b>	<b>Page</b>
2.1	Dimensions of ATAUT Model	13
2.2	Dimensions of SERVQUAL Model	14
2.3	Dimensions of e-SERVQUAL Model	16
3.1	Likert Scale	29
3.2	Operational Variable Definition	32
3.3	Rules of thumb correlation range	34
3.4	Cronbach's Alpha Coefficient Range & Strengths of Association	36
4.1	Pilot Test's Validity Test	41
4.2	Reliability Test	42
4.3	Respondents' Demographic (Gender)	43
4.4	Respondents' Demographic (Age)	44
4.5	Respondents' Demographic (Academic Level)	45
4.6	Respondents' Demographic (Income)	46
4.7	Respondents' Demographic (Occupation)	47
4.8	Summary of Reliability	49
4.9	Summary of Responsiveness	50
4.10	Summary of Fulfillment	52
4.11	Summary of Privacy	54

4.12	Summary of Consumer Adoption	55
4.13	Result of Pearson Correlation Analysis	57
4.14	Multiple Regression Analysis	59
4.15	ANOVA Table	59
4.16	Coefficients	60

**LIST OF FIGURES**

<b>Figure</b>	<b>Title</b>	<b>Page</b>
1.1	Flowchart by Chapter	8
2.1	Consumer Adoption Process	10
2.2	Unified Theory of Acceptance and Use of Technology	12
2.3	Theoretical Framework (Online Service Quality Dimensions)	21
4.1	Respondents' Demographic (Gender)	44
4.2	Respondents' Demographic (Age)	45
4.3	Respondents' Demographic (Academic Level)	46
4.4	Respondents' Demographic (Income)	47
4.5	Respondents' Demographic (Occupation)	48



## LIST OF ABBREVIATIONS AND SYMBOLS

ATM	Automated Teller Machines
BNM	Bank Negara Malaysia
SERVQUAL	Service Quality Model
SFCU	Stanford Federal Credit Union
SPSS	Statistical Package for Social Science
UTAUT	Unified Theory of Acceptance and Use of Technology

**LIST OF APPENDICES**

<b>No</b>	<b>Title</b>	<b>Page</b>
A	Gantt Chart	75
B	Questionnaire	76

## **CHAPTER 1**

### **INTRODUCTION**

#### **1.1 BACKGROUND OF STUDY**

Digital revolution is one of the technologies that have changed almost every aspect of our life in the 21st century. The power of the internet and World Wide Web are becoming a normal part of our daily life due to the increased usage of modern information and communication technology. Nowadays, a lot of people prefer to use self-service technology compared to the traditional services as internet technology is time saving and convenient for the customers.

Online banking is the service that was established by the bank due to the fast growth of e-commerce in the era of internet-based network economy to follow the information economy trend. In fact, online banking has spread quickly and became more popular around the world since the first online banking service was established by Stanford Federal Credit Union (SFCU) in October 1994 (Business Wire, 1995).

One of the most important attribute of E-service quality is evaluating the failure and success of an e-commerce business (Zavareh et al. 2012). The important role of e-services quality is it shows the business's ability to perform online services and its success in offering e-services (Yang, 2001 and Zeithaml, 2002) including online banking. Service quality plays an important role to gain competitive advantage and become a differentiator for many service organizations (Parasuraman and Zeithaml, 1988). In order to distinguish itself from others, a service provider in the banking industry needs to recognize the importance of providing good service quality.

From the mentioned above, a good e-service quality provided by a bank will lead to high consumers' adoption level with the online services and allows it to survive in the competitive banking market (Wang et Al. 2003). As a result of this phenomenon, banks should have a good understanding about the service attributes that customers use to evaluate online banking service quality. Therefore, it is necessary that the e-service that is provided by the bank to be constantly monitored and adjustments and improvements may be carried out as soon as possible.

## **1.2 PROBLEM STATEMENT**

According to Ang. et.al (2013), while online banking is still in the growth and development stage, the research found that there are low adoption rate of online banking in Malaysia. There have many consumers yet to adopt the online banking service even though online banking system provides a lot of functions and features that enables customers to do the banking transactions through banking website.

One of Asia countries of the Top 10 highest number of internet users which is Malaysia in year 2012. Within twelve year (2000 to June 2012), the Internet users in Malaysia had increased from 3,700,000 to 17,723,000. There is at most 379% of increment and it is indicated 60.7% of the total population (Internet World Stats, 2012). However, to date, there is no any accuracy statistics of the number of internet banking users in Malaysia. The increase number of internet users will supposedly lead to the increase of the number of online banking's user (Yeoh & Benjamin, 2011). Therefore, the researcher carry out this research to determine online service quality towards consumer adoption of online banking in Malaysia.

### **1.3 RESEARCH QUESTIONS**

In this study, the researcher has identified four questions to be answered. Some question has taken concern to achieve better explanation of this research:

- i. Does the reliability of online service affect the consumer adoption of online banking in Malaysia?
- ii. Does the responsiveness of online service affect the consumer adoption of online banking in Malaysia?
- iii. Does the fulfillment of online service affect the consumer adoption of online banking in Malaysia?
- iv. Does the privacy of online service affect the consumer adoption of online banking in Malaysia?

## **1.4 RESEARCH OBJECTIVES**

The main objectives of this study is to the online service quality toward customer satisfaction in Malaysia's online banking. To be more specific, there are four research objectives that will be highlighted in this study. These objectives are as follows:

- i. To investigate whether reliability of online service affect the consumer adoption of online banking in Malaysia.
- ii. To determine whether responsiveness of online service affect the consumer adoption of online banking in Malaysia.
- iii. To identify whether fulfillment of online service affect the consumer adoption of online banking in Malaysia.
- iv. To find out whether privacy of online service affect the consumer adoption of online banking in Malaysia.

## **1.5 SCOPE AND LIMITATION OF THE RESEARCH**

### **1.5.1 Scope**

Measuring the consumers' adoption by using the concept of e-SERVQUAL Models based on Malaysia's online banking system. By using the e-SERVQUAL Models concept, banking institutions can improve their online banking system to ensure customers'

satisfaction. The purpose of this research is to determine the importance of online service quality that influences on consumer adoption of online banking in Malaysia.

### **1.5.2 Limitation**

The target respondents for this research are 150 online banking users. However, some constraints may happen making it difficult for the researcher to carry out the study. The researcher has highlighted several limitations of this study.

Time constraints are one of the limitations. The study is a research that requires a longer time to enable the researcher to get better quality information and data to achieve an effective and efficient research results. The researcher has less valid information and data to use because it is a project research and semester work of four months for the final year students as requested by the university.

The second limitation of this research is financial constraints where the researcher has to face throughout this study. The researcher needs to spend a lot of money to print out the articles and journals to make them as references.

The third limitation for this research is probably the lack of cooperation from the respondents and the attitude of the respondents when questionnaires were used to collect the data and information for the research. The researchers do not have the ability to know whether the respondents are answering the questionnaires honestly or not and the information and data that are collected from the questionnaires cannot be guaranteed to be good quality.

## 1.6 THE SIGNIFICANCE OF RESEARCH

This research is expected to reveal on how the online service quality is related to consumer adoption in Malaysia's online banking system. The findings of the research will offer an important managerial insight to the banks and the banks will be able to reassess their initiatives.

In the quest to enhanced the customers' value, customers' satisfaction and increased the competitive advantages in the banking industry, the banks should evaluate the service quality that they perform on their websites. The manager of the bank must have a good understanding of the connection between service quality and consumers' adoption to upgrade their services. By performing these basic services and adding value to their services, it will lead to an increase in the consumers' adoption level.

Besides that, in order to have a good planning on how to target marketing campaigns and the most effective way to invest for a maximum competitive impacts return, the banks should have a better understanding about the customers' varying needs and wants across the market segments. In order to attract various types of customer from different segments, the managers should focus on the level of quality and types of services that they provide and offer to the customers.

In addition, the online service quality offers a high level framework of web technology contributing towards the forging of long-term customer relationships. In order to improve their companies' profits and increase the market shares in the long run, the banks should be aware of the value of technology in driving growth in a customer-focused organization.