APPROVAL

I/ we hereby declare that I/ we have read this dissertation/report and in my opinion, this dissertation/report is sufficient in terms of scope and quality as a partial fulfilment the requirements for the award of Bachelor Degree of Technopreneurship with Honour

SIGNATURE   :   ………………………………

NAME OF SUPERVISOR   :   Dr. Murzidah Binti Ahmad Murad

DATE   :   ……………………………........

SIGNATURE   :   ………………………………

NAME OF PANEL   :   IR Budiono Hardjono

DATE   :   ……………………………….....

SERVICE QUALITY IN THE HEALTHCARE SECTOR:

ENHANCING CUSTOMER SATISFACTION USING ONLINE SERVICE

NUR HIDAYAH BINTI ROSLAN

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DECLARATION

I hereby declared that this thesis entitled

"SERVICE QUALITY IN THE HEALTHCARE SECTOR:

ENHANCING CUSTOMER SATISFACTION USING ONLINE SERVICE"

is the result of my own research except as cited in the references. The thesis has not
been accepted for any degree and is not concurrently submitted in the candidature of
any other degree.

SIGNATURE : …………………………………........

NAME : …………………………….................

DATE : …………………………….............

DEDICATION

I learned patience, perseverance and dedication.

I know,

If I really want to achieve something,

I will find a way now or soon.

To my precious parents;

Who educate me,

Motivate me,

Always stand up for me to learn until this level.

To my siblings

For their endless love and prayers.

To my supervisor,

For their helped,

Their supervision

And giving me courage during my rough time,

Without their blessing and encouragement,

this research is impossible to complete in short period of time.

To all the lecturers and friends,

They help me a lot in giving opinion,

Support,

Advice,

Information throughout this research.

I know, it's not easy.

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Bismillahirrahmannirrahim..

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I would like to dedicate my deepest gratitude and sincere appreciation to my supervisor, Dr. Murzidah Binti Ahmad Murad for her valuable guidance and encouragement were given to me. Without her guiding, supporting and contributing from her opinion, it is hard for me to complete this final year project smoothly.

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ABSTRACT

Nowadays, consumer lifestyles have shifted to favour more convenience-oriented and time-saving options for health occasions, as more and more Malaysians have less time and energy to have a medical consultation at hospital and to get information about their health. Patient satisfaction is one of the most quality dimensions and key success indicators in healthcare industry. Therefore, this paper aims to measure patients' or users' satisfaction with access to information and consultation using Portal MyHEALTH among Melaka citizens by using e-SERVQUAL model. Healthcare sector needs to adopt the perceived service quality (SERVQUAL) to enhance customer satisfaction in order to improve healthcare websites performance. The importance of service quality in improving customer satisfaction and loyalty in traditional business settings has been established through the use of such instruments as SERVQUAL. However, these established service quality dimensions, or similar measures, have not been applied to electronic commerce settings. This finding, E-SERVQUAL more suitable to be used to measure user satisfaction with the online service. E-SERVQUAL is based on the proven conceptual framework of the SERVQUAL instrument and is adjusted for the unique attributes of the electronic commerce.

Key Words: *Healthcare, Online service, MyHEALTH, Customer Satisfaction*

ABSTRAK

Pada masa kini, gaya hidup pengguna telah beralih untuk memihak kepada lebih banyak pilihan berorientasikan keselesaan dan menjimatkan masa untuk aktiviti kesihatan, memandangkan lebih ramai rakyat Malaysia mempunyai kesuntukan masa untuk mengadakan perundingan perubatan di hospital dan mendapatkan maklumat tentang kesihatan mereka. Kepuasan pesakit adalah salah satu daripada dimensi yang paling berkuality dan petunjuk kejayaan utama dalam industry penjagaan kesihatan. Oleh itu, kajian ini bertujuan untuk mengukur kepuasan pesakit atau penguna terhadap pengaksesan maklumat dan perundingan menggunakan Portal MyHEALTH di kalangan warga Melaka dengan menggunakan model e-SERVQUAL. Sector penjagaan kesihatan perlu mengguna pakai kualiti perkhidmatan yang dilihat (SERVQUAL) untuk meningkatkan kepuasan pelanggan untuk meningkatkan prestasi laman web penjagaan kesihatan. Kepentingan kualiti perkhidmatan dalam meningkatkan kepuasan pelanggan dan kesihatan dalam tetapan perniagaan tradisional telah ditubuhkan melalui penggunaan instrument seperti SERVQUAL. Walau bagaimanapun, dimensi kualiti perkhidmatan yang ditetapkan atau langkah-langkah yang serupa tidak digunakan pada tetapan perdagangan elektronik. Hasil kajian inin mendapati model e-SERVQUAL lebih sesuai untuk digunakan untuk mengukur kepuasan pengguna dengan perkhidmatan dalam talian. E-SERVQUAL didasarkan pada rangka kerja konseptual yang terbukti dari instrument SERVQUAL an diselaraskan untuk sifat-sifat unik dalam perdagangan elektronik.

Kata Kunci: Penjagaan Kesihatan, Perkhidmatan Dalam Talian, MyHEALTH, Kepuasan Pelanggan

TABLE OF CONTENT

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ABBREVIATION	MEANING
H_0	Null hypothesis
H_1	Alternative hypothesis
ANOVA	Analysis of Variance
SERVQUAL	Service Quality
MIDA	Malaysian Investment Development Authority
MCMC	Malaysian Communications and Multimedia Commission
KKM	Kementerian Kesihatan Malaysia
JKN	Jabatan Kesihatan Negeri
RQ	Research Question
RO	Research Objective
N	Population size
S	Sample size
SPSS	Statistical Package for Social Science
n	Numbers
M	Mean
Mdn	Median
Mo	Mode
Std	Standard
SD	Standard deviation

LIST OF APPENDICES

CHAPTER 1

INTRODUCTION

1.1   INTRODUCTION

In this chapter, the introduction of the most important topics that involve background, problems statement, objectives, research questions, a scope of study, and important of research are provided in this chapter; Chapter 1. The background of the study describes the most important subtopics which is about online service in healthcare sector.

1.2   RESEARCH BACKGROUND

As expectation, healthcare services will be continuously expanding by global demand in the future due to projected demographic shifts, among which are the increase in aging population, life expectation and lifestyle diseases. According to Malaysian Investment Development Authority (MIDA) in 2017, healthcare in Malaysia is an attractive proposition due to offering the world-class quality healthcare, which is easily accessible and competitively affordable for patients' satisfaction. Besides that, Malaysia healthcare also has establishments contributed RM16.8bil to Malaysia's economy in 2015, compared to RM10.4bil from 9,152 such establishments in 2010, the data by The Star Online (2017) meaning that healthcare sector one of the high contribution to Malaysia's economy and continuity growth.

Nowadays, most people use internet to get medical and health information through online platform or digital technology (Rainie, 2013). Besides that, the use of digital technology in healthcare sector related to encouraging staff and patients to simplify and improve delivering data process, gathering the medication information and etc. Therefore, healthcare sector need to take advantage of technology-enabled services to improve facilities and increase services to consumers in the sector, all to better deliver the best service for consumer in term of information, customer support and intangible services. One of the example is using portal or website to help customers to avoid waiting time, measured own health behaviour and have medication information every time and everywhere.

Modern healthcare services sector was expected to provide technology that meets the highest priority to the modern consumer to ensure service quality. As mentioned by Malaysian Investment Development Authority (MIDA) in 2017, Malaysia healthcare sector was operates efficiency and widespread two-tier system which consist of a universal healthcare system; run by Malaysia government to serves Malaysian citizens, and a co-existing private healthcare system that provides to Malaysia citizens and foreign patients alike. Buckley (2006) has mentioned in his research before that in the public sector, profit motivation has little relevance, consumers similarity, definability of tasks and measurable outcomes can serve as likely conditions of success in other to provide the services.

According to Malaysian Communications and Multimedia Commission (MCMC) in 2017, only 18.3 per cent of Malaysians have been fully utilising the Internet technology to generate income and enhance their potential in business. Mazlan (2017) said the number of fully utilising the Internet technology still the lowest among other online activities although 76.9 per cent or 24.5 million Malaysia citizens were internet users, surpassing global averages. It is because the Internet has certainly transformed the way people socializing, getting information, self-entertaining and involved in economics activity (MCMC, 2017). This is as a way for Malaysia healthcare sector to take advantage to involve with Internet technology in their services.

There is widely accepted the idea that perceived service quality is a multidimensional paradigm (Grönroos, 1990; Parasuraman *et al*., 1985). Service quality

is a topic that is important to be discussed which related with all type service industry including healthcare sector because service quality is one of the factor to influence customer satisfaction. Besides, used by a mature service industry to ensures the industry to survives from competitor growth and as a source of comparative advantage. Thus, healthcare sector service quality evaluation is depending on customer perspective on the superiority of the services provided by healthcare sector (Sumaedi & Yarmen, 2015). Generally, customer perspective is the guideline to studied service quality in service sector included healthcare industry. Therefore, researchers propose that service quality can be measured by customer satisfaction level on the superiority of online service performance provided by healthcare industry. Hence, in accordance to Zeithaml (1990), the service quality is "the consumer's judgment about a service's overall excellence or superiority".

In order to study customer satisfaction using online service platform or websites, a generic model proposed by Wesso (2014) and Parasuraman *et al*. in 1985 that is called as SERVQUAL. SERVQUAL reveals that service quality consists of five dimensions or factors which is tangibles, empathy, reliability, responsiveness, and assurance but e-SERVQUAL replaced the tangibles and empathy with efficiency and security / privacy (Gazor, 2012).

Therefore, to understand the concept of this study, how it works without going too far into the technical details is the first step to look for. Additionally, a definition of e-SERVQUAL itself and all the factor in literature review is needed to have a shared understanding. An interesting part is to see how this online service quality will give a big impact towards customer satisfaction. Consumer now is more influenced to have a deal with online service or Internet technology in having a service. Besides, due to technology advancement, serving a good service by Internet technology was speedily demanded and all service industry took initiative to understand consumer preference and took actions whereby it focused customer needs and wants is based on how deep understanding of the consumer satisfaction. In this research, a e-SERVQUAL model scale will use for measuring Portal MyHEALTH website quality.

1.3 REVIEW OF KEMENTERIAN KESIHATAN MALAYSIA, MyHEALTH WEBSITES

Portal MyHEALTH plays an important role in improving facilities and increase services to consumers in order to deliver the right information at the right time. Since this portal is open and free to all, it has attracted a bug of users visited every hour and every day. According to (Kalia, 2017), internet users and mobile users increasing due to most the business using ecommerce to improve their sales and review. It is the main cause for all sector in Malaysia to move and follow the technology step, in order to fulfil customers or users need and want.
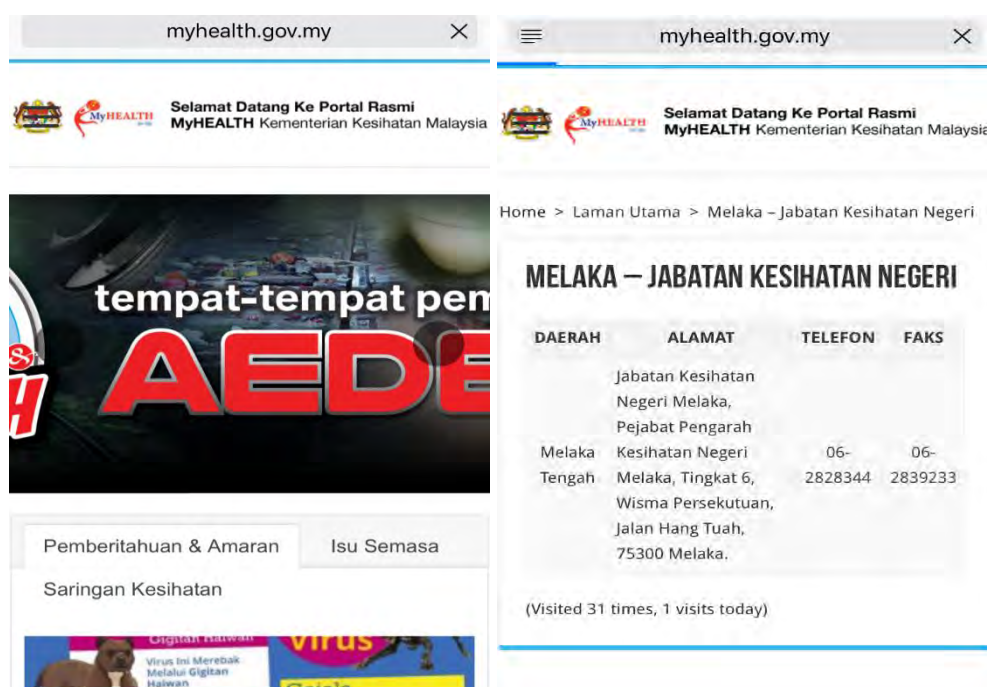

Figure 1.1: *Kementerian Kesihatan Malaysia, MyHEALTH portal*

Based on Figure 1.1, the features in Portal MyHEALTH which is included:

1. General medicine information
2. Consultation
3. Health motivation video
4. Immunisation schedule

5. Symptoms of infection awareness

6. Illustration

7. Dental health care

The websites created due to rapidly demanded by customer that have a limitation and problem to went to clinic or hospital if they have a sickness, infection and so on. Therefore, the study is to help Kementerian Kesihatan Malaysia (KKM) and Jabatan Kesihatan Negeri Melaka (JKN) measured their MyHEALTH websites whether it helpful and fulfil customer satisfaction by using e-SERVQUAL model.

1.4 PROBLEM STATEMENT

To come up with the excellent service provided to the right set of customers, various of industry are increasingly using Internet technology, advance technology or other alternative to give the best services or fulfil their customer satisfaction level. This is helping firms to improve their services quality in the industry. The coming of Internet or digital technologies in healthcare fields has surely simplified and helped to ease patients and healthcare staffs. According to LaPelle *et al*. (2006), knowledge diffusion to healthcare professionals has been inhibited by the difficulty of accessing latest information, ignorance of the availability of information, the lack of time available to acquire information, and poorly organized information meaning online service is much important in deliver information and as customer service platform. Besides that, according to Alharbe and Atkins (2014), there is higher number of user dissatisfaction with the current system provided in hospital compare to number of satisfied user and participants strongly agree and interested with automatic system.

To enhancing customer satisfaction using online service, customer awareness about online service Portal MyHEALTH is one of the issues regarding this topic. Li *et al*. (2015) stated that patient or user observations of service quality are correlated to the service awareness and hospitals' management abilities. Therefore, this research will look

further into patient or customer awareness about online service in healthcare sector. If consumers are not aware of the Kementerian Kesihatan Malaysia website (MyHEALTH), they will not be in a position to seek out healthcare sector which are equipped with the online service. According to Karim (2003), it is importance of governments to create awareness and educate the public about online service in many sector or industry in Malaysia in order to improve service delivery.

Researcher decided to use SERVQUAL as a tool in this research because according to Chakraborty and Majumdar (2011), SERVQUAL instrument is the most widely used tool in order to measure service quality and patient satisfaction in all sector. Given this point, second issue is perceived service quality (SERVQUAL) in the healthcare sector, where Carman (1999) has suggested to modify, delete some of the SERVQUAL functions or introduce new dimensions that is accepted in specific service situations. Therefore, what researcher want to look forward is which of SERVQUAL factor can be part of the e-SERVQUAL factor in Malaysia healthcare sector website or digital technology, since there is scarce research look into this issues in Malaysia healthcare sector. However, e-SERVQUAL need to be adopt to enhance customer satisfaction in order to compete in this healthcare industry. Through the online service technology, they can use as customer service platform in order to fulfil customer satisfaction. They need to choose the appropriate type of online service for easily accepted by customer. Online service applications are becoming rapidly growth and useable due to the positive advantages they offer to customer or users; transparency, referrals, contacts with other users, etc. and their effect on customer influence (Urban, 2003).

1.5   RESEARCH QUESTION

This study is attempting to measure the quality of MyHEALTH Portal among Melaka Tengah citizen and based on the research problem, three research questions are formulated as follows:

RQ1:   What is the level of customer awareness towards Kementerian Kesihatan Malaysia websites; Portal MyHEALTH?

RQ2:   What is the relationship between consumer perceived service quality and customer satisfaction towards Portal MyHEALTH?

RQ3:   What is the most influential factor that will impact customer satisfaction in Melaka healthcare sector website?

1.6   RESEARCH OBJECTIVE

Based on the problem statement and research question, there are several objectives to be achieve in this study which are:

RO1:   To determine the level of customer awareness towards Kementerian Kesihatan Malaysia websites; Portal MyHEALTH.

RO2:   To analyse the relationship between e-SERVQUAL factors with customer satisfaction.

RO3:   To identify the most influential factor that will impact customer satisfaction in Melaka healthcare sector website.

1.7   SCOPE OF STUDY

The purpose of this study to identify the perceived service quality toward customer satisfaction in the health sector and this study also determines the impacts on customer satisfaction by develop e-SERVQUAL factor in health field. Furthermore, this research is focus on users or patients of Portal MyHEALTH satisfaction. The study predicts that the customers have an experience using Portal MyHEALTH even just once a life.

1.8   SIGNIFICANT OF STUDY

This research is to analyse perceived service quality using online service (Portal MyHEALTH) and its effect toward the customer satisfaction in health sector in Malaysia. Online service will be tested as a marketing tool that is part of e-SERVQUAL in enhancing customer satisfaction. This research focuses on new generation and people that aware with online service in health sector because they like to trying something new, involved in Internet technology, like to changing lifestyle and trend. This study will also be beneficial for the other country health sector strategize their websites effectiveness strategy in order to become competitive in the health sector. Moreover, this research is aimed to facilitate other country healthcare sector and informing them in aligning their services provided with their objectives.

Hopefully that the result of this study will beneficial to Malaysia healthcare system that can perform this research as an approach to improve all the healthcare websites. This effort also helps Kementerian Kesihatan Malaysia to measure customer satisfaction towards their MyHEALTH websites. In addition, this portal will be successful and largely accepted and acknowledge in Melaka, also Malaysia due to the effort of Kementerian Kesihatan Negeri in creating awareness among users and customers.

1.9   SUMMARY

From this chapter this research highlights the importance of customer satisfaction towards healthcare sector will affect the development and growth of national economies. There is no doubt that healthcare sector plays a vital role in developed as well developing economies. The enhance customer satisfaction through online service tool will be tested as part of healthcare perceived service quality. In the upcoming Chapter 2, literature review will be discussed.