# PERCEIVED FACTORS INFLUENCING THE ACCEPTANCE OF SELF SERVICE TECHNOLOGY BY BABY BOOMERS IN MELAKA

NUR AFZAN AQILAH BINTI SHUHARDI

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

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# NUR AFZAN AQILAH BINTI SHUHARDI

Submitted in partial fulfillment of the requirement for the Bachelor of Technopreneurship with Honours

# FACULTY OF TECHNOLOGY MANAGEMENT AND TECHNOPRENEURSHIP UNIVERSITI TEKNIKAL MALAYSIA MELAKA

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# APPROVAL

I, hereby declare that I have read this project paper. This project paper is submitted to
Universiti Teknikal Malaysia Melaka as a requirement for completion and reward of
Degree Bachelor of Technopreneurship.

Signature	:
Supervisor's Name	: DR. MURZIDAH BINTI AHMAD MURAD
Date	·
Signature	<u>:</u>
Panel's Name	: PROF MADYA DR. JUHAINI BINTI JABAR
Date	<b>:</b>

:

# DECLARATION

	work of this exercise is mine except the quotations and ze that have been duly acknowledge"
Signature	:
Name	: NUR AFZAN AQILAH BINTI SHUHARDI
Date	·

## **DEDICATION**

I would like to give some appreciation for my beloved mother and father, Wan Shamsiah Binti Wan Yusof and Shuhardi Bin Md Salleh because they always support and give some motivation in order for me to complete this research study. Other than that is my sister Nur Alyaa Amirah Binti Shuhardi as she always find a way to help me and advise me about my study and not to forget my fellow course mates and my housemates as they always help to solve the problem and give recommendation about my research. Lastly is I would like to thank my supervisor Dr. Murzidah Binti Ahmad Murad, for all the guidance and valuable knowledge.

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## **ABSTRACT**

Self-service technology is stated as the connection of technology that allow consumer to form a service independent without direct service employee involvement. Self-service kiosks nowadays is a prove that shows how our technology has improve to help in making life becomes easier and faster for consumer in many kind of situation. Whether buying bus ticket, pay utility bills or posting the parcel, this technology play the most important part in shorten the time and energy in our daily lives. This research is about the to identify and know what is the factors that influencing the acceptance of self-service technology by the baby boomers in Melaka, to investigate the most influence factor influencing baby boomer's intention to use self-services technology and to evaluate the relationship between intention to use and acceptance of self-services technology by baby boomers. This study used the quantitative method and questionnaires to obtain the necessary data from the respondent. The respondent of 113 respondents from the baby boomers generation. The factors that influence the use of SSTs is perceived usefulness, perceived the ease of use, resistance to change and technology anxiety.

**Keywords:** SSTs, Perceived Usefulness, Perceived the Ease of Use, Resistance to Change and Technology Anxiety

## **ABSTRAK**

Teknologi servis layan diri dikatakan sebagai teknologi yang membolehkan pengguna untuk membentuk sebuah perkhidmatan bebas tanpa penglibatan pekerja perkhidmatan terus. Kios layan diri kini merupakan bukti yang menunjukkan bagaimana teknologi kita telah bertambah baik untuk membantu menjadikan kehidupan lebih mudah dan lebih pantas untuk pengguna dalam pelbagai keadaan. Sama ada membeli tiket bas, membayar bil utiliti atau menghantar petak, teknologi ini memainkan peranan paling penting dalam memendekkan masa dan tenaga dalam kehidupan seharian kita. Kajian ini adalah mengenai untuk mengenal pasti dan mengetahui faktor-faktor yang mempengaruhi penerimaan teknologi layan diri oleh generasi tua di Melaka, untuk menyiasat faktor paling mempengaruhi niat generasi tua untuk menggunakan teknologi perkhidmatan diri dan untuk menilai hubungan antara niat untuk menggunakan dan penerimaan teknologi perkhidmatan diri oleh generasi tua. Kajian ini menggunakan kaedah kuantitatif dan soal selidik untuk mendapatkan data yang diperlukan daripada responden. Responden terdiri daripada 113 responden dari generasi tua. Faktor-faktor yang mempengaruhi penggunaan SST adalah rasa kegunaan, kemudahan penggunaan, kalis perubahan dan keresahan teknologi.

**Kata Kunci**: SSTs, Rasa Kegunaan, Kemudahan Pengunnaan, Kalis Perubahan dan Keresahan Teknologi

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## CHAPTER 1

## INTRODUCTION

# 1.1 Background Study

Self-service technology is stated as the connection of technology that allow consumer to form a service self-dependent without direct service from the workers involvement (Meuter et al ,2000). Research from Considine & Cormican (2016), cited by businesses says that the self-service technology (SSTs) embracing is the vital element in order to control costs and improve the customer experiences. Self-service technology or also known as self-service kiosk has widely been implement whether to provide services or information in public places and government.

To boost customer service, early digital kiosks often be like telephone booths, but were adopted by retail, food service and hospitality. Typically, interactive kiosks are located in attention areas such as airport, hotel lobbies or shops as the technology that incorporation enables kiosks or the technology machine to perform a variety of range of functions and to become self-service technology. For example, the kiosks can allow users to order items from a store's catalog when they are not in inventory, to check out a book from the library, find the information about the product, order for a hotel key card, enter a synchronised utility bill account number to make an online transaction, or collect cash for goods. The custom components like bill acceptors, coin hoppers, thermal printers and card readers require kiosks to accommodate the additional needs of the owner.

Self-service kiosk is one of the technology that has been developed to help people in making their daily task easier. This self-service kiosk has been growing on a rapid speed nowadays. Almost every places are using this system in their place. Self-services kiosk or interactive kiosk is a computer post that had a feature of focussed on the hardware and software that give admission to the applications and information for commerce, communication, education and entertainments.

Self-service technology nowadays is a prove that shows how our technology has improve to help in making life becomes easier and faster for people in many kind of situation. Whether buying bus ticket, pay utility bills or posting the parcel, this technology play the most important part in shorten the time and energy in our daily lives. This technology has provide an advance level of service for the customer as this technology were designed for the user to operate without any staff presence. It were built with software that can handle many tasks, smart algorithm to handle the cash or security processes for the user without face to face service interaction to make service more accurate and convenient as it can extend the services to 7 days a week for 24 hours without waiting for working hours.

This technology were placed at many type of places according to their usage. For example, at the fast food restaurant such as KFC or McDonald, they place this self-service ordering kiosk to avoid congestion of people at the counter during peak hour so that the other customer can put their order through this machine.

The term baby boomer refer to an obviously increasing to the birth rate. The past war population had increasing and was described as a boommers (Sylvia F. Porter, 1951). Pew Research Centre (2018) stated that baby boomers a born between the years of 1946 to 1964. The United States Census Bureau also stated baby boomers as persons who were born in mid of 1946 and mid of 1964 in the United States (Colby & Ortman, 2015). Compared to the younger adults in adopting the new technologies, older adults has slower progress (Czaja et al, 2006), but if that particular technologies have some value or seems to have benefits to them, the can use it for example in sustaining the worth of life (Heinz, et al., 2013)

#### 1.2 Problem Statement

People nowadays have been influence heavily by technology as it becomes one of the important factor in life. The technology that has been widely used is self-services kiosk that can be seen in almost every places because of the ability of these technology to ease and fasten peoples task and already widely been used in many country including our country in many kind of different service to satisfy the customer need. This technology been used by all generations including the baby boomers, whom their age are starting from 50 until 75. Despite the broadly usage of these technology by people not all range of age find that these technology help them as sometime it can be seen as a nuisance or hindrance in completing their task.

According to Bashir & Albarbarawi (2011) study, they have identified some reason on why there are some people who not willing to adopt the self-service technologies which is the most important reason is due to the user personal behaviour and the need to use the technologies. Baby boomer category used less technology in completing their task.

Bashir & Albarbarawi (2011), stated that the cultures and principles shows a key role and some of users choose to be an innovator while some of consumers choose to adopt the technology and the last or slower they used to classify as the laggards. The study from (Lai, 2017) are quite similar with the product adoption model which is the people has been divided into five kind of groups of the consumer which is the innovators, the early adopters, the early majority, the late majority lastly is laggards and they are behaving differently.

Figure 1.1 The Adoptions Curve The Chasm Laggards 16 % Early adopters Early majority 34 % Late majority 34 %

Source: Innovation Adoption Curve (Roger, 1995)

The second reason the consumer did not want to use the SST because they are a scared of making any mistake. When using SST, they felt vulnerable and worried that the services they encountered or goods they pay for were not up to their levels, which could result in waste of money and time. In addition, complicated language and interfaces are one of the factors that discourage users to use the SST.

The usage of technology by baby boomers are still in the early stage as study from Fenich et al., (2011), says that some of the baby boomers still rely on the email and internet to do the business and cannot used to the new technology which for example they use phone texting and Skype because the feel quite uncomfortable with the newer communication technology. This shows that baby boomers are using the technology but they still cannot try to adapt other technology such as for example self-service technology.

Therefore, the factor that influencing the generation of baby boomers to use the self-service technology is really important for the researchers to understand.

# 1.3 Significant of Study

The important of this research is to see whether people from baby boomers can accept this kind of technology in their daily live. As the research is about to identify the factor that influence the acceptance of the self-service. Other than that, this study also can provides the government with some valuable information. The study results show the willingness of the nation to consider the use of SST, the government division can then change the recent practice of implementing SST because of the different benefits. That's not only reduces the waiting time for the public, but also allows the governments to focus more on the group of society that needs government's attention.

# 1.4 Research Question

- 1. What are the factors influencing baby boomer's intention to use self-service technology?
- 2. What are the most influence factor that can influencing the baby boomer's intention to use self- service technology?
- 3. What are the relationship between intention to use and acceptance of self-service technology by baby boomers?

# 1.5 Research Objective

- 1. To determine the factors influencing baby boomer's intention to use self-services technology.
- 2. To investigate the most influence factor influencing baby boomer's intention to use self-services technology
- 3. To evaluate the relationship between intention to use and acceptance of self-services technology by baby boomers.

# 1.6 Scope, Limitation and Key Assumption

## 1.6.1 Scope

The scope of this study is about finding the factors that influence the acceptance of self-service kiosks amongst baby boomers which people that were age starting from 55 until 73. This research was conducted in the Melaka.

## 1.6.2 Limitation

This research has a few limitation which can be a problem to this research which the first one is the time factor. To conduct a good and perfect research, maybe it could take a much longer time. We do not have sufficient time to do the respondent's survey. Next is, which our scope is only focusing on the baby boomers

which only age about from 55 until 73. It is quite hard to get them to be the respondent as maybe they have a sight problem so it is hard for them to read the survey paper.

# 1.6.3 Key Assumption

The assumption that can be made from this research is that the respondent have an experience in using the self- service kiosk. We also assume that the respondent will give an honest and truthful response.

# 1.7 Summary

Throughout this chapter, the I can conclude the research objective of this study is very relevant towards this new era of rapidly growing technology which is can be seen throughout our daily live. The importance of these technology are giving a big impact toward our world all generation needs to familiarize themselves with these growing technology. In the next chapter, I will explain more about the understanding of people especially the baby boomers generation and the constraint that they have in these self-services kiosk technology.

# **CHAPTER 2**

## LITERITURE REVIEW

# 2.1 Introduction

In this chapter were discussed about the overview of involvement of self-service technology (SST). The service that had the encounter with SST, baby boomers generation and the acceptance theory also being discussed in this chapter which each of the variable is explained on how it will influence the acceptance of SST by baby boomers. Lastly, theoretical framework of the research had been drafted in the chapter.

# 2.2 Defining Self-Service Technology (SST)

SSTs mean that the interfaces involving the technological without the involving the staff that allow consumer to use the service. An alternative way have be introduced with SSTs and were broadly applied in many service for the consumer to use the services and to form value with the technology (Meuter et al, 2000). According to Alcock & Millard (2006), the meaning of the self-service is that it is a Self-service is interaction of technology where the consumers themselves are the only people involved in the experience. Another study from Meuter et al (2000), says that SST is interfaces involved the technology that assist consumers to commit the service independently. Automated hotel check-out, automatic teller machines (ATMs), library self-scanning, and airport self-service kiosks are some examples of SSTs (Meuter et al, 2000). Many past research already shown the perspective in the different context about the adoption of the SST.

Moreover, Other SST options offer a wide range of self-service options when integrated with the Internet. Types of SSTs include digital kiosks, automated teller machines (ATMs), internet or mobile self-service banking, online transfer of electronic funds, etc. Customers were known as co-producers through the use of SSTs with a more variety choices of the space and time that are suitable according to their own needs. With knowing about the SSTs, many businesses would give multiple of customer service networks and provide consumers with many advantages. The easy and also understandable interface from the service system can attract the consumers and it also can boost the commitment of customers to service providers (Zeithaml et al, 2002). The other benefits of the SSTs in the meantime is including the time and cost savings, the convenience of the locations (Kauffman & Lally, 1994), perceived enjoyment or perceived fun while using the technology (Dabholkar, 1994, 1996), and efficiency (Bitner et al, 2000)

SSTs were also developed in the libraries, for example the self-collect and also while returning the books borrowed and also the self-vending machines books. (Chang and Chang, 2009). After borrowing the books through the self-vending

machines book, the user or reader will get the receipt so that they can update the borrowed books in the records (Lin & Hsieh, 2011).

Their research shows that variety of the industries and ways of distribution, include the involvements in the firm of security, security, airlines, internet and others. Oyedele & Simpson (2007), studied the possible effects of locus control, time pressure, technology anxiety and self-efficiency on SST use decisions in shops, libraries, and hotels, but no variable had a significant impact on library use. Many research concentrated on a particular SST background as Dabholkar & Bagozzi (2002), stated that there are a Touch Screen attitudinal model to order in a fast food restaurant as the effects of market characteristics and factors were tested and the result supported the effects of situational factors in the use of SST distribution options by consumers. As far as service users are concerned, SSTs can save much time and costs of living as it also can increased the control and provide reliable, versatile and give suitable service to the consumers without the direct contact (Meuter & Curran, Self-service technology adoption: comparing three technologies, 2005). As far as it seen, other than providing the consistency in the service given, self-service based on technology also are very stable in giving the quality of service.

The SSTs can be given into many categories. Meuter et al. (2000) stated that the classification the types of SSTs according to two scopes which is the interface s and the type of technology. (Slack & Rowley, 2002) Claimed that kiosks are highly connected to day-to-day life because they are situated in public spaces such as shopping malls, airports, railway stations also to serve customers as agents.