

A STUDY ON ADOPTION OF ONLINE BANKING APPLICATION AMONG  
GENERATIONS IN MELAKA

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## DECLARATION

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## ABSTRACT

Internet banking is becoming a new focuses as the number of internet users is increasing globally and its benefits. This study aimed to investigate the factors and determinants of internet banking adoption among two generations which is baby boomers generation and generation Y (Gen Y) in Melaka. The adaptation of online banking application occur at a slow rate due to costs issues, trust in one's bank and security concerns, . The contribution of this research perhaps can be enhanced user to use this technology. Therefore, the Technology Acceptance Model (TAM) model is tested and revalidated in this research to understand and measure the use and acceptance of technology in online banking application. The TAM model is useful to explain the understanding of individual in that technology. In this research, TAM model was verified in the context of online banking application adoption in Melaka. Accordingly, this study has analyzed the factors on perception of online banking adoption towards the adoption and use of technology. The data was then analyzed using SPSS through exploratory factor analysis and multiple linear regression analysis. As a result, TAM model for online banking adoption have been introduced. The results has demonstrated that social influence, expected effort and performance are significant in influencing behavioral intentions to use technology. In addition, the conclusion of this study provides a wide range of implications in the different context of use and adoption of online banking applications

Keywords: Adoption, Technology, Baby boomers, Gen Y, Online banking, Mobile applications, Security, Perceived

## ABSTRAK

Perbankan Internet telah menjadi fokus baru dimana bilangan pengguna internet semakin meningkat di peringkat global dan faedah-faedahnya. Kajian ini bertujuan untuk mengkaji faktor dan penentu penerimaan perbankan internet di antara dua generasi yang mana generasi baby boomers dan generasi Y (Gen Y) di Melaka. Penyesuaian aplikasi perbankan atas talian berlaku pada kadar yang perlahan disebabkan oleh masalah kos, kepercayaan pada sesebuah bank dan kebimbangan terhadap keselamatan. Sumbangan kajian ini mungkin boleh mempertingkatkan pengguna untuk menggunakan teknologi ini. Oleh itu, model Technology Acceptance Model (TAM) diuji dan disahkan semula di kajian ini untuk memahami dan mengukur penggunaan dan penerimaan teknologi dalam aplikasi perbankan dalam talian. Model TAM adalah berguna untuk menjelaskan pemahaman individu dalam teknologi itu. Dalam kajian ini, model TAM telah disahkan dalam konteks atas talian penggunaan aplikasi perbankan di Melaka. Oleh itu, kajian ini telah menganalisis faktor terhadap persepsi penerimaan perbankan atas talian ke arah penerimaan dan penggunaan teknologi. Data yang telah dianalisis menggunakan SPSS melalui analisis faktor penerokaan dan analisis regresi linear. Hasilnya, model TAM telah diperkenalkan untuk penggunaan bagi perbankan atas talian. Keputusan telah menunjukkan bahawa pengaruh sosial menawarkan perkhidmatan yang dijangka dan prestasi adalah penting dalam mempengaruhi niat tingkah laku untuk menggunakan teknologi. Di samping itu, sebagai kesimpulan kajian ini menyediakan pelbagai implikasi dalam konteks yang berbeza penggunaan dan penggunaan aplikasi perbankan atas talian

Kata kunci: Penggunaan, Teknologi, Baby boomers, Gen Y, Perbankan atas talian, Aplikasi mudah alih, Keselamatan, Persepsi

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**LIST OF ABBREVIATIONS**

<b>ABBREVIATIONS</b>	<b>MEANING</b>
TAM	Technology Acceptance Model
TRA	Theory of Reasoned Action
TPB	Theory of Planned Behavior
PU	Perceived Usefulness
PEU	Perceived Ease of Use
SI	Security Issues
BTMI	Bachelor Degree Technology Management Innovation
UTeM	Universiti Teknikal Malaysia Melaka



## CHAPTER 1

### INTRODUCTION

#### 1.1 Background of the Study

As the world of the technology arises nowadays, the amount of user of mobile phone especially smartphone around the world also gets arise day by day. In year 2000 to 2010, the total mobile internet user growth is 444.8% in worldwide (Foon, Chan, & Fah, 2011). People nowadays use the mobile phone for everything in their daily lives by using the mobile application (mobile apps). One of the functions of the mobile application is to make online banking transaction.

Online banking has many names such as Internet banking, electronic banking, e banking, virtual banking etc. Mobile banking is refers to the usage of any mobile devices to performed bank transaction and any services, for example, to view the account statement, checking on account balance, fund transfer and bill payment through mobile equipment such as smart phones, mobile phones, and any other gadgets

(Laukkanen, 2007). Another word said electronic banking as “an umbrella term for the process by which a customer may perform banking transactions electronically without visiting a brick-and-mortar institution” (Keivani et al., 2012).

This study basically has been conducted to identify the differences in the perceptions of online banking adoption through mobile application with two different generations of groups. Mobile banking one of the innovative method to access banking services through one channel where customer interact with financial institution by using mobile phone (Luo et al. (2010). This study specifically, distinguishes between Generation Y (Gen Y) and baby boomers in terms of their factor of adoption on mobile apps. Generations Y will represents the younger group of consumers meanwhile baby boomers generations will represent matured of group of mobile service consumers.

## **1.2 Problem statement**

Lately the Internet has been growing and offering many Web-based applications as a new method for the organizations to sustain their customers and offer them latest services and products (Martins, Oliveira, & Popovič, 2014). The growing of the internet also have effected to the increasing of user numbers on mobile banking which the users look to benefit from the freedom afforded without the need for cables, time and place (Alafeef et al., 2011).

Nowadays with the globalization trends worldwide in term of using on mobile banking apps, it is difficult for a society whether matured or young to deny from what was happening around. The information technology day by days has shrunken the world, as a result of which, time and distance have become non-entities. It has covered every aspect of life. Today, many people in world are adopting new generation technologies by using mobile phone or smartphone. So in this case mobile banking is quiet relevant to

society adopting it to improve their daily life. Previous study has indicated that mobile banking users usually will choose to utilize traditional banking service due to first issues (AbuShanab et al., 2010). This mean, online banking application have theirs own positive and negative impact.

In Malaysia, the factors of accessibility, reluctance to changes, costs, trust in one's bank, security concerns, convenience, ease of use via online survey that potentially influence internet banking adoption (Foon et al., 2011). The lower income level one of the factors that make people avoid the usage of mobile banking application (Alafeef et al., (2011). This is because this technology needs an advanced of mobile device in addition to an internet connectivity service. Basically, matured generations like baby boomers and who is on lower incomes, are the most less to adopt the internet banking technology especially people from rural areas. Beside, maybe some of them have problems which difficult to use because of integrate banking system and also the improvement of screen design of the mobile for example like the touch screen smartphone.

Another generation like Gen Y maybe they have some issue like lack of awareness of internet banking (Aboelmaged & Gebba, 2013). The lack of awareness maybe occurs because of the less of exposure on use of online banking apps especially for those who do not have higher education level. Beside that, the advances of technologies maybe also make them have a lack of skills to use that kind of technology.

Baby boomers and Generations Y (Gen Y) are two different types of consumer groups in term of lifestyles and technology used and decision based behavior (Kumar & Lim, 2010). This study will conduct to identify the differentiation perceptions between this both generations in term on adopting online banking application through mobile apps.

Assuming that the usage patterns of these two groups will different, the findings from this study are expected to assist banking industries in Malaysia in developing

effective marketing strategies through customize mobile application by tuned to the specific requirements of these two consumer segments.

### **1.3 Research Question**

1. What are the factors affecting online banking application adoption?
2. How far does the factors affecting online banking application adoption among baby boomers generations and generation Y (Gen Y)?

### **1.4 Research Objective**

1. To identify the factors affecting online banking app adoption.
2. To evaluate factors affecting online banking app adoption among baby boomers generations and generations Y (Gen Y).

### **1.5 Scope, Limitation and key assumption of Study**

Based on this research, the scope is to find out what the factors that affecting the adoption on online banking application among generations. There are a big different in term intention to use between baby boomers generations and generation Y (Gen Y). Maybe some issues occur among baby boomers generations is the trust issues of new technology and lack of awareness issues for generations Y (Gen Y). The result of this research will come up with the main factors that affect the technology adoption on

online banking application among generations. The respondent of this research will separate by two generations which is Baby boomers Generations and Generations Y (Gen Y). Limitations of this research basically are the location of this research which the research will conduct just in around of the Central of Melaka. This is because around this central of Melaka have a lot Banking sector and Educational sector. The respondent should be the people around these two sectors. Other limitations also maybe time factor which is researcher not have enough time to conduct all the survey to the respondent. To implement this research also require a lot of cost that can be as limitations to the researcher. The researcher assume that respondent have an adequate knowledge to be apart of respondent data collection. The researcher also assumes that the respondent has more experience to researcher to handle this topic to justifiable the answer.

## **1.6 Importance of the study**

This research will give benefit and contribute to the academicians in term of referral for their studies and research; to identify the two generations adopting online banking adoption and what factors that affecting online banking application adoption. Age factor is a widely used for demographic variable to characterize technology adoption between two type of consumer groups (Kumar & Lim, 2010). Beside that, these studies also hopefully can give a contribution and impact to the Banking industry especially to identify their customer requirement in term of using the mobile apps especially for matured generations which most of them look at the technologies as barriers to use for the daily life. This research maybe can be used for banking industry to customize their mobile apps that suitable with all generations user like baby boomers generations and generations Y (Gen Y). Banking industry also at the same time can improve their customer service in term of mobile apps.

## **1.7 Summary**

Online banking application one of the current technology to east people in their daily life. The application of electronic banking becomes the most usefulness in this era of internet technologist. This chapter was described introduction of the topic and background of the study. The Researcher also has explained about problem statement. After that, the research continues with research question and research objective. Lastly, this chapter has made a scope and limitation of study.

## CHAPTER 2

### LITERATURE REVIEW

#### 2.1 Introduction

This chapter will present a review of a few literature reviews that related with this study. First, this study will start with overview of evolution of online Banking, Baby boomers and Y Generations. Lastly this chapter will introduce a few of technology acceptance and adoptions model from the previous study.

#### 2.2 Evolution of Banking Technology

Many countries in the world know days already aware about the technological evolution among them especially in banking sector. The mobile banking technology was started with one system that calls (IVR) Interactive Voice (Alafeef et al., (2011). IVR basically is an automated telephony system which interacts with callers and then gathers information and routes calls to the appropriate recipient. This system make bank sectors can provide variety of services to theirs customers. Then, it witnessed the emergence of

the bank based SMS services which was defined as client requesting the services of the bank by sending text messages such as check balance and latest transactions of his account (Laukkanen, 2007). After that, Web/Wireless Application Protocol (WAP) based services come up and be a focuses on in the mobile banking era .Now days the totals of mobile phones users exceed the totals of customer bank accounts. In this era, bank sector mostly use mobile application as a medium to introduce their banking service (Alafeef et al., (2011). This happens because the changes of consumer behavior. Currently the online transactions by mobile phones or tablet devices were rapidly increased. Companies which provide services with these devices quickly offer a multiple of payment transaction types. This is one of the strategies to interact consumer to use its. The evolution began by allowed banking services via channels that best meets the needs of the institutions client base like Automated Teller Machine (ATM), online, mobile and tablet. The innovation was not end there. Now, banking sectors now have provided access to tools for example like mobile point of sale solutions for their small business customers and mobile bill payment also. Based on this speed to the consumers was grown fast and it is a normal thing when using other digital services. The adoption basically decisions to take full use of an innovation as the best of action that can be reach (Rogers, 1995). Technology adoption quiet importance because it is the transportation that allows a lot of people to joining rapidly changing world where the technologies become central to our lives. People who are not adopted will cut his capability limit to participate in financial with use facility benefits involved with the technology. By understanding the factor effected technology adoption will helps this research forecast and manage who adopt, why, and under what conditions. Based on this information this research can evaluate where people are in adoption process help as they move from technology adoption through to usage. Mobile Banking apps one of the evolution in banking technology that have already use by banking industries in Malaysia nowadays as a strategies to interact consumer to adopt their services. Next section will elaborate more about the mobile banking apps in Malaysia.