ONLINE BANKING ADOPTION AMONG GEN Y

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ABSTRACT

This paper investigates the factors that influence online banking adoption among generation Y (Gen Y) Politeknik Sultan Azlan Shah. The students answered self-administered questionnaires. The questionnaires were divided into sections A and B where section A consists of demographics profiles and section B consists of all the questions related to Online Banking Adoption, Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions and Trust. The findings revealed that there were significant positive relationships between i) Performance Expectancy ii) Effort Expectancy iii) Social Influence iv) facilitating Conditions v) Trust with Online Banking Adoption. Data relating to the constructs were collected from 105 polytechnic students in Politeknik Sultan Azlan Shah and subject to Pearson Correlation Analysis. Researcher collected 105 responses from 110 for a response rate of 95.4%. The findings demonstrate that the students (Gen-Y) with higher facilitating conditions and social influence are more likely to adopt online banking, followed by Effort Expectancy, Trust and Performance Expectancy. As for Pearson Correlation Analysis was performed on 105 respondents, all independent variable are strong positively associated with the Behavioral Intention (BI). The findings also demonstrate that effect expectancy, trust and performance expectancy indirectly can develop interest in online banking adoption. This study also provides an opportunity to expand the research on different background of the students, whether they are coming from rural areas or urban areas. Future study also can focus on a different group of polytechnic student base on their study background.

Keywords: Gen Y, online banking adoption, performance expectancy, effort expectancy, Social influence

1.0 Introduction

In order to achieve Wawasan 2020, financial institution in Malaysia need to develop and strengthening their infrastructures, facilities and services in order to ensure that they are ready to serve the nations as a whole. One of the facilities that may contribute to the success in financial industry is online banking. The payment system is an important component of the economic and financial infrastructure of a country which it can facilitate the circulation of money in the economy, and enabling the conduct of trade, commerce and other economic
activity. Having an effective payment system that facilitates the efficient movement of funds is therefore highly important for financial development and the growth of the economy.

1.1 **Background of Online Banking in Malaysia**

Electronic revolution in the Malaysia banking industry first began in the 1970s. The earliest electronic innovation being adopted by banks was Automated Teller Machine (ATM). The earlier step was taken in the year 1981 was introduced by Maybank. Then, followed was the introduction of personal computer banking in line with the development networking and facilities in telecommunication and information technology development across Malaysia. The first domestic bank to launch online banking was Maybank with its website called www.maybank2u.com.my. The banking services offered including balance inquiry function, bill payments, card services, fund transfers, cheque order as well as fixed deposit placement.

With the introduction of online banking on 1st June 2000, the Bank Negara Malaysia (BNM) allowed local banking institutions to embrace such online banking system to cater the needs of online banking in Malaysia. With this, the financial industry seemed to offer modern with high technology instruments in order to ease and attract more customers to use their alternate channel while performing their banking transactions. However, even with the online banking services come in place, and nowadays been offered by most of the banking institutions market player, the percentage of the use of online banking by Malaysian still at lower phase.

1.2 **Problem of Statement**

Internet usage showed tremendous hike from year 2000 to year 2010, with the growth of 444.8% worldwide. Asia’s users contribute a larger proportion (42.2%) of internet users, followed by Europe (24.2%) and North America (13.5%). Malaysia, one of the Asia countries was among the Top 10 highest number of internet users in the year 2009 alone. In year 2000, Malaysian internet users recorded 3,700,000 and increase to 16,902,600 in June, year 2010. This showed that there is 356.8 % increment in ten year times and this involved 64.6% of the total population (Internet World Statistic, 2011).

With the increasing number of internet users and launching of online banking, logically the number of online banking usage should be increased as well. Malaysia has an approximate 16.9 million Internet users in 2010. However, out of this figure, only 9.6 million of Malaysians were online banking users (Bank Negara Malaysia, 2010), resulting in about 56% of adoption level. Rate of online banking usage among the Malaysian Internet users trigger the necessity to increase the online banking use among Malaysian.

Today, there are 27 banks inclusive of local, foreign and Islamic banks equipped themselves with online banking facilities. Besides, there is a sharp rise in the number of subscribers from 2.6 million in 2005 to 9.4 million in 2010, showing a significant 262% of leaping in online banking (Bank Negara Malaysia, 2010).

Bank Negara Malaysia (2010) also reported that the penetration of online banking to population has increased to 33.4%. It is clearly showed that online banking still has plenty of room to grow in Malaysia. With a population around 31 million (The Star, 2013) (Economic Planning Unit Malaysia, 2010), Generation Y, aged between 15-29 years old seems to contribute to 25% of the population in Malaysia for the year 2010.
Table 1: Malaysia’s Population Year 2010

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Malaysia</th>
<th>Non-Malaysian</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-14</td>
<td>9,165,043</td>
<td>687,174</td>
<td>9,852,217</td>
<td>32%</td>
</tr>
<tr>
<td>15-29</td>
<td>7,577,262</td>
<td>361,369</td>
<td>7,938,631</td>
<td>25%</td>
</tr>
<tr>
<td>30-44</td>
<td>5,862,718</td>
<td>721,608</td>
<td>6,584,326</td>
<td>21%</td>
</tr>
<tr>
<td>45-59</td>
<td>4,168,906</td>
<td>285,780</td>
<td>4,454,686</td>
<td>14%</td>
</tr>
<tr>
<td>60-74</td>
<td>1,707,512</td>
<td>52,929</td>
<td>1,760,441</td>
<td>6%</td>
</tr>
<tr>
<td>75 &amp; above</td>
<td>537,354</td>
<td>14,970</td>
<td>552,324</td>
<td>2%</td>
</tr>
</tbody>
</table>

Source: Economic Planning Unit Malaysia 2010

Therefore, with the low penetration among Gen Y, this drives the researcher to focus on the factors which influence adoption of online banking by Gen Y. Researcher will do the study based on the UTAUT model which is to be applied to investigate the factors that influence adoption of online banking among Gen Y in Malaysia.

1.3 Objective(s) of the research
i. To determine the relationship between performance expectancy and online banking adoption of Gen Y.
ii. To identify the relationship between effort expectancy and online banking adoption of Gen Y.
iii. To identify the relationship between social influence and online banking adoption of Gen Y.
iv. To determine the relationship between facilitating conditions and online banking adoption of Gen Y.
v. To identify the relationship between trust and online banking adoption of Gen Y.

1.4 Scope of the Study
The research is focusing on online banking products and services which been offered by financial institutions within Malaysia. It is further highlighted on the generation Y in Malaysia, particularly young generations. The research examines the respondent from 105 polytechnic’s students in Politeknik Sultan Azlan Shah (Gen-Y). The findings demonstrate that the students (Gen-Y) with higher facilitating conditions and social influence are more likely to adopt online banking, followed by Effort Expectancy, Trust and Performance Expectancy.

1.5 Significance of the Study
This study is conducted to identify the factors that influence online banking adoption among Gen Y, also with the purpose to create the awareness of how important of using online banking. The researcher also will try to determine of core problems, whether the educators or regulator will be able to develop certain programs and design relevant courses which can help Gen Y in make use of online banking which been offered by financial institutions in Malaysia. With the information gain also, provided the output or finding can give clear pictures to the financial institutions on the credit strategies, instead they can develop more marketing strategies to attract youngsters or young graduates to use online banking. Therefore, the competition among financial institutions will increase and this will boost up the competitiveness if retail banks and indirectly the products will be improved in and will attract more to save in local banks.
Other than that, come across the researchers’ attention on adoption of online banking of Gen Y, and this study can be an inspiration for other researchers to continuously exploring on this topic. Findings from this study, also will give clear picture to the financial institution in order...
to design their online banking facilities to be more attractive in order to attract Gen Y to make use of the facilities.

2. Literature Review

2.1 Review of Related Literature

Online Banking

Banking info (2009) define Internet Banking as banking which provides a fast and convenience ways to perform the transactions via internet. User must have internet access, a web browser and registered account with the banks. Through internet banking, user can submit loan or credit card application, transfer of funds, pay bills and perform other request just through web. Banks can make their products and services more attractive to Gen Y through personalization of services. Each offering should be attractive enough to be on the wish list of this generation. They rely on opinions and word of mouth of their peers and if banks fail to offer their exceptional services, which they run the risk of losing their brand reputation. Most important things is do not forget about protection and security while design the services or products to Gen Y. Internet has transformed the traditional financial services provided by banks. Via online banking can be enormous such as 24-hours of unlimited access, funds transfer and settlement of bills at the convenience of the banks' customers. However, it is much better if the online transactions increase with greater accessibility and web security.

In Malaysia, there are numerous products of online banking which were specifically designed for Gen Y such as CIMB Bank Kwik Account by CIMB. CIMB Bank Kwik Account is an account that customer can open online, anywhere, without going into a branch, giving you immediate usage of the account. Customer can open an account via the bank's online site, Cimb Clicks, even if he has no prior banking relationship with the bank and without any minimum deposit requirement. According to Renzo Viegas, Deputy Group CEO and Head of Consumer Banking, CIMB Group (The Star, 2013) “The banking landscape is evolving in tandem with consumers’ rapid adoption of mobile technology. With more consumers growing accustomed to online and mobile solutions in their daily lives, banking products and services have to evolve to support this behavioral shift and banking solutions are fast becoming a necessity instead of an option, especially amongst the Gen-Ys, who will be the next wave of banking customers”.

Other than CIMB, Hong Leong also introduced their attractive and interactive online marketing through product named MACH which was catered to attract more Gen Y customer. Hong Leong Bank managing director Datuk Yvonne Chia revealed that the new kind of modern banking, targeting the Gen Y, was driven by market forces. She also said that the modern lifestyle retail banking concept would make its presence in urban centers nationwide and offer full suite of products and services (Business Times, 2013).

<table>
<thead>
<tr>
<th>Year/Number of User (000)</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>% Annual Change 2010</th>
<th>% Annual Change 2011</th>
<th>% Annual Change 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual</td>
<td>6,057</td>
<td>7,958</td>
<td>9,638</td>
<td>11,637</td>
<td>13,430</td>
<td>21.1%</td>
<td>20.7%</td>
<td>15.4%</td>
</tr>
<tr>
<td>Corporate</td>
<td>135</td>
<td>165</td>
<td>209</td>
<td>236</td>
<td>227</td>
<td>26.7%</td>
<td>12.9%</td>
<td>-3.9%</td>
</tr>
</tbody>
</table>

Source: Bank Negara Malaysia

With the numbers of banks or financial institutions offered varieties of banking transaction can be performed online, and even some of them specifically designed for Gen Y, the level of use
of online banking not achieving high level. Liao and Cheung (2008) suggested that empirical test to be performed and significant in order to introduce individual perceptions regarding usefulness, ease of use, reliability, security, responsiveness, and continuous improvement into the core framework of online banking. Students at college seem to have high awareness on world wide web. However, in the study by Suresh and Shahapur (2013) there is significant difference between students in rural and urban area.

**Online Banking Adoption**
In one development study by Vejačka (2013) revealed that majority of their respondents prefer performing online banking compared to traditional way.

**Performance Expectancy**
Their respondents didn’t use online banking due to lack skill to conduct online banking, and also lack of knowledge that they not only can perform online banking in the study by Hassan, Yahya, Amin, & Arshad (2011), but also can pay their bills rather than walk in to the post office.

**Effort expectancy**
In the study by Yuen (2013), young Malaysian seem to have less positive attitudes compared to young Americans towards using Internet Banking. Ernovianti E, Kassim U, Rashid R, Meor Shaari M, & Nik Mat N, (2012) on study which was performed on 170 students of Tuanku Syed Sirajuddin Polytechnic, using the Technology Acceptance Model, also revealed that the intention to use internet banking were strongly influenced by self-efficiency and claimed that online banking is not easy as performing internet surfing.

**Social influence**
In 2013, Yuen’s study reported that young adults in Unites States more likely to be influenced by their social environment when performing internet transactions.

**Facilitating conditions**
According to Liao and Cheung M (2008), by performing online banking, transactions can be performed without have to walk in personally over the counter. However, due to no personal contact with the officer from the bank, banks must deliver higher service quality in order to attract more customers to use online banking. Meanwhile, 50 % of respondents in the study by Singhal and Padmanabhan (2008) agreed that internet banking is convenient and flexible ways of banking and it also have various transaction related benefits.

**Trust**
Almost more than half of the staff at Universiti Tunku Abdul Rahman reported they check their banking information via online banking (Ernoviant et al., 2012), however those who are not using online banking revealed that they are not using online banking due to lack of confidence in the security. Hassan et al. (2011) revealed their respondent prefer to deal with employees of the banks compare through online banking unless there will be an improvement in security level and services of electronic banking.

**Gen Y**
Generation can be best defining as a group of people or society which about same age or within one particular group of age (Longman, 2004). Gen Y or normally known as Gen Y is the generation of people born during the 1980s and early 1990s. The name was based on Generation
X, the generation that preceded them. 74% of Gen Y normally has their saving goals, but only 27% of them have better understand and planned their saving.

Even though Gen Y known with their unable to save wisely, Gen Y concerned of their future in financial matter, have clear financial goals but don’t know whether they can achieve their goals in saving or not (Chua, 2010). In term of religion attachment, Gen Y had known as group that lack of religious engagement (Collins, 2011). Most of the college students, particularly those are from generation Y are having high level of awareness about the internet but the result for those who are coming from urban area are higher from those who are coming from rural area (Suresh and Shahapur, 2013). This trigger that most of the generation Y are well informed about internet use, however the higher learning institution should provide adequate facility in order to equip them to be full aware of internet, and particularly in this study is online banking.

**Gen Y in Polytechnics (Malaysia)**

Gen Y in this study are students of the Politeknik Sultan Azlan Shah. Students of Politeknik Sultan Azlan Shah mainly consist of those who were completed their secondary school and aged between 18 to 30 years old. Therefore, they have been chosen as Gen Y in this study. Furthermore, this group has been selected as it is within the researcher’s field. Located in Behrang, Perak, the students of the Politeknik Sultan Azlan Shah were coming from four (4) different departments, Commerce Department, Mechanical Engineering, Electrical Engineering and Civil Engineering. With the total numbers of 3,777 students, the researcher finds they can be better represented as Gen Y in this study.

<table>
<thead>
<tr>
<th>Table 2.2 Statistic of Politeknik Sultan Azlan Shah’s student.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>Commerce</td>
</tr>
<tr>
<td>Mechanical</td>
</tr>
<tr>
<td>Electrical</td>
</tr>
<tr>
<td>Civil</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
</tr>
<tr>
<td>Source: Sistem Pengurusan Maklumat Politeknik Sultan Azlan Shah</td>
</tr>
</tbody>
</table>

In study done by Vejačka (2013), almost 73% of his respondents (their ages ranged with 20 to 29 years) were university students and more than 19% already had university degree. However, researcher finds that level of study also will influence the online banking use among polytechnics students, as majority of polytechnic’s students are studying at diploma level.

### 2.2 Theoretical Framework

**Chart 2: Framework Based on UTAUT**

![UTAUT Diagram]

- Performance Expectancy
- Effort
- Social Influence
- Facilitation
- Trust

**Behavioral Intention towards Adoption of Online Banking**
Unified Theory of Acceptance and Use of Technology Model used by Foon and Fah (2011) to explore the behavioral intention of using internet banking at Kuala Lumpur through 200 respondent via convenience sampling. Beside four factors from UTAUT Model (Performance expectancy, effort expectancy, social influence, facilitating conditions), factors of trust also included in their study. In general, the respondents rated themselves in high behavioral intention score. Thus, researcher also attempted to use same framework to identify the determinants factors of behavioral intention towards internet banking based on four factors in UTAUT Model and trust.

Research Design and Methodology

3.1 Research Methodology
In completing this study, the researcher used quantitative method via questionnaire survey. The questionnaire contained demographics and questions related to Online Banking Adoption, Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions and Trust which also been used by Foon and Fah (2011). Each variable will be measured using 5-point Likert scale. All variables constructed in section B was based on proposed theoretical framework and using Likert scale measurement (Sekaran, 2004). The target population are students of Politeknik Sultan Azlan Shah in the amount equal to the sample size of 105 respondents. Questionnaires from various past studies have been adapted which are related to this topic.

4.1 Analysis and Findings
Reliability test performed using Cronbach’s Alpha. This test will indicate how well the items positively correlated to one another. If the result of Cronbach’s alpha is close to 1, it means the internal consistency reliability is higher (Sekaran, 2004). The Cronbach’s alpha test on 105 respondents showed that all constructs are exceeding the minimum alpha value of 0.6.

Table 4.1 Summary of Reliability

<table>
<thead>
<tr>
<th>Construct</th>
<th>Cronbach’s Alpha</th>
<th>Number of Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance Expectancy</td>
<td>0.877</td>
<td>4</td>
</tr>
<tr>
<td>Effort Expectancy</td>
<td>0.827</td>
<td>4</td>
</tr>
<tr>
<td>Social Influence</td>
<td>0.851</td>
<td>5</td>
</tr>
<tr>
<td>Facilitating Condition</td>
<td>0.812</td>
<td>5</td>
</tr>
<tr>
<td>Trust</td>
<td>0.747</td>
<td>5</td>
</tr>
<tr>
<td>Behavioral Intention</td>
<td>0.884</td>
<td>3</td>
</tr>
</tbody>
</table>

Source: Developed for the research
The strength and direction between two different variables can be analyzed using linear relationship Correlation analysis (Pallant J, 2005). Pearson Correlation Coefficient analysis will be used to test of the hypotheses of this study.

As for Pearson Correlation Analysis was performed on 105 respondents, all independent variable are strong positively associated with the Behavioral Intention (BI). Facilitating Condition (FC) has the strongest correlation with Behavioral Intention (BI) (r=0.600), followed by Social Influence (SI) (r=0.537), Effort Expectancy (EE) (r=0.518), Trust (T) (r=0.517) and Performance Expectancy (PE) (r =0.405). Based on the correlation analysis, we can accept all hypotheses as the p values are less than 0.05.
Table 4.2 Pearson Correlation Analysis

<table>
<thead>
<tr>
<th></th>
<th>Behavioral Intention</th>
<th>Performance Expectancy (PE)</th>
<th>Effort Expectancy (EE)</th>
<th>Social Influence (SI)</th>
<th>Facilitating Condition (FC)</th>
<th>Trust (T)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson Correlation</td>
<td>.405**</td>
<td>.518**</td>
<td>.537**</td>
<td>.600**</td>
<td>.517**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
<td>.030</td>
<td>.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>105</td>
<td>105</td>
<td>105</td>
<td>105</td>
<td>350</td>
</tr>
</tbody>
</table>

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed).

Source: Developed for the research

H1: There is a significant relationship between performance expectancy and online banking adoption of Gen Y.

The weakest relationship between performance expectancy and online banking adoption in this study was well supported by previous study which claimed that their respondents didn’t use online banking due to lack skill to conduct online banking, and also lack of knowledge that they not only can perform online banking but also can pay their bills rather than walk in to the post office (Hassan et al., 2011).
H2: There is a significant relationship between effort expectancy and online banking adoption of Gen Y. The significance strong relationship between effort expectancy and online banking supported by previous study done by Ernovianti et al (2012) which claimed that the respondents are relative young whereby they can easily learn online banking.

H3: There is a significant relationship between social influence and online banking adoption of Gen Y. This is significance with study by Yuen Y (2013) which claimed young adult are likely to be influence by their social surrounding while performing internet transactions.

H4: There is a significant relationship between facilitating conditions and online banking adoption of Gen Y. The significance strongest relationship between performance expectancy and online banking was not well supported by Yong K H (2009) as through his study on staff of UNITAR, revealed that majority of their respondent access online banking at their workplace.

H5: There is a significant relationship between trust and online banking adoption of Gen Y. However, the results contradict with the studies which performed by Yong K H (2000) which revealed that their respondents not using Internet banking due to lack of confidence in the security of Internet banking.

5. Discussion and Conclusions

This study is necessary for research in furthering postgraduate study, within the time given, it may not be possible for the researcher to explore in depth and further on the subject. Even there are many users of the online banking, but the researcher only focus on generation y as they will be main pillar in Malaysia’s financial industry. This is the main reason why the scope of this study only on generation y and also only within Malaysia industry.

Research on quantitative method will be used which is well known to most academicians. The researchers will apply the knowledge during first degree, postgraduate study and experiences gained to complete this study. However, there may be vary unforeseen information that researchers lack to gather because million information available online, printed, published, reported and also by verbal.

Young generation make fully use of technology in order to make their life easier, and well connected, since they are very addicted to high technology savvy. Even Gen Y are well versed with online application, they still lacking of financial management skills. The financial institutions not only need to attract more Gen Y but also educate them with knowledge of financial skills. The challenges here are to create interactive platform, if possible as attractive as social media platform. Right kind of promotion channel must be developed in an attractive way, and this is proven through the result as Gen Y use online banking because its’ facilitating condition. However social influence and effort expectancy also can be main focus to be look in especially by financial institutions, in order to make sure online banking is useful, and serve its purpose, as medium of user to perform financial transactions.
Bibliography/ References


