



## Research Paper

# THE IMPACT OF DIGITALIZATION OF RETAIL BANKS IN MALAYSIA ON CUSTOMER EXPERIENCE

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## ABSTRACT

*Customers today experience accelerated digital lives, supported by rapid internet penetration, increase in smartphone adoption and expanded accessibility to wider networks. In this atmosphere, banks face a fundamental challenge on how to sustain and grow their business in the face of digital disruption and emergence of new customer demands. Research indicates that close to 70% of banks worldwide do not have a systematic digital strategy to provide a seamless and positive customer experience which is crucial for both new customer acquisition and retention of existing customer base. Banks need to formulate and fine tune their digital strategies with advent of this fourth revolution. This paper examines the drives of digital banking from the customer perspective, impact of digitalization on customer experience and the correlation between digitalization and components of customer experience which are customer satisfaction, customer effort, customer loyalty and customer recommendation. Nine independent variables with twenty seven constructs were used to analyze data collected from 250 respondents. This research is only based on retail banking customers within the Malaysian context.*

**Key Terms:** digital banking, customer experience, customer satisfaction, customer effort, customer loyalty, customer recommendation

## 1. INTRODUCTION

Digitalization is a global phenomenon which enables customers to quickly adopt digital banking and services as the new business paradigm. Existing players in the industry only have to quickly adopt and integrate this new reality or stand the risk of becoming obsolete (Broeders & Khanna, 2015). Banks historically have leveraged on technology to improve their efficiency and service offering to its customers, however rapid development and innovation in payment systems, customer interaction channels and communicate media have resulted in much wider implications on how banks engage customers (Cuesta et. al, 2015).

Most banks in general commenced their digital journey at the turn of the century and have overcome many hurdles in the last couple of decades. However, the advent of technological advancement spur a myriad of challenges for banks as more customers use mobile phones and tablets to perform banking transactions, increase in demand for omni-channel experience and mobile experience. Requirement for banks to change is further accelerated due to compliance demands; especially post the 2008 financial meltdown (Vater, Cho and Sidebottom, 2012).

Rapid development of digital economy is propelling rise of innovation, competitiveness and growth opportunities within the financial industry. Advancement and adoption of digital technologies and integration into business models is key for banks to achieve greater scale, penetrate new markets swiftly, thorough understanding of customers' needs which leads to higher profitability and scalability (Peppers & Rogers, 2016).

Rogers (2016) argues that we are in the age of the customer, where there is a fundamental need for banks to reinvent their strategies or be forgotten. This requires top management of banks to make bold decisions in the next 5 to 10 years to overcome the threats and leverage of opportunities brought in by digitalization. Further argument is that digitalization would transform the existing banking ecosystem where existing banking products and services will be highly commoditized with digitalization becoming a key differentiator for banks to stay relevant in ensuring customers' financial well-being.

Since 1998, banks and financial institutions in Malaysia have been growing and leveraging on the economic boom supplemented by the political stability. This has resulted in an intense competition amongst the major players within the industry which requires banks to constantly look at vantage points to grow their wallets share, revenue and ultimately profitability. This includes both marketing strategies and digitalization strategies. While both the strategies are important, banks must also realize that customer experience is crucial in ensuring sustainability of business and to remain competitive.

Review of existing research also leads to the fact that most published researches are conducted in developed countries and focus primarily on electronic banking adoption (Chan and Lu, 2004; Jayawardhena and Foley, 2000; Kolodinsky, Hogarth, and Hilgert, 2004; Yiu, Grant, and Edgar, 2007). Little research is done to correlate impact of the digital revolution within banking sectors and customer experience especially in Malaysia. Limitation to such empirical study is due to the slowness in the advancement of digital banking technology in this Asian region. Additionally, the customer's perception and reception towards the transformation of their day to day banking from the conventional means to digital banking is another factor on the subject matter.

A wide range of customer demographic, stringent regulation demands and low competition and threats from new entrants could be other underlying factors. However, the Primary focus of this study is from the customers' point of view where the use of technology is available, because many existing research on banking focus on internet banking (Natarajan et al., 2010).

This research investigates the impact of digitalization of retail banks on customer experience within the Malaysian banking landscape. The primary aim of this study is to examine impact of digitalization of retail banks in Malaysia from the customers' lenses.

Research objectives are as outlined below:

- ✓ To examine key factors that drive adoption of digital banking from a customer's perspective.
- ✓ To examine how customer experience is impacted by digitalization of retail banking.

- ✓ To examine correlation between key determinants of digital banking and components of customer experience – satisfaction, effort, loyalty and recommendation are impacted by digitalization of retail banking.

The following questions were developed as basis for this research and will be examined at a later stage:

- ✓ What are the key determinants of digital banking adoption from the customers' perspective?
- ✓ Does digitalization on retail banking positively impacts customer experience?
- ✓ Is there any correlation between digital banking and customer experience components – satisfaction, effort, loyalty and recommendation?

## **2.0 LITERATUR REVIEW**

### **2.1 Retail banking in Malaysia**

Banking in Malaysia is centered on the central bank, Bank Negara Malaysia (“BNM”), which is then encircled by commercial banks, finance companies, merchant banks and other financial institutions. Commercial banks have the largest market share and these are split between local and foreign banks. Local banks have higher asset footprint whereas foreign banks' spread and scale is regulated by the government; which regulates licensing of new foreign financial institution to protect the domestic banks (Muhamad & Fadzian, 2006). Malaysia banking industry today only has eight local commercial banks as a result of mergers, deregulation and increased competitive pressures.

The Malaysian government took steps to merge finance companies to consolidate and rationalize the financial sector after the 1998 financial crisis. Such merge program was later inclusive of local banks leading to restructuring and creation of new banking groups. In 1999, all local banks were accorded the space to consolidate, merge and re-structure. As a result by 2012, the banking sector was consolidated into eight main banking conglomerates Affin Bank Berhad Group, Alliance Bank Berhad Group, AmBank Berhad Group, CIMB Group, Hong Leong Bank Berhad Group, Malayan Banking Berhad Group, Public Bank Berhad Group and RHB Bank Berhad. This saw a widened size distribution of banks in Malaysia and path way for higher market concentration in future (Muhamad & Fadzian, 2006).

### **2.2 Digital Banking**

Digital banking is an internet based platform in which customers can choose and use variety of banking services ranging from making deposits, transfers, paying bills to making investments (Pikkarainen, Karjaluo & Pahlila, 2004). Banks today leverage on electronic channels and platforms to manage operations related to maintenance of customers' accounts. Banks utilize electronic channels as key interaction avenue with customers to sell their products and services. This form of banking is referred to as electronic banking (Azouzi, 2009).

The digital banking is delivering customized and consistent brand experience across all channels and customer touch points accentuated by analytics and automation that results in paradigm shift in targeting operating module, service culture and service delivery consequences that are both desired and profitable (Maria et al., 2014). Digitalization of banking services is beneficial to both the financial institution and customers. Banks perceive the digital revolution as a strategy to gain competitive advantage to ultimately increase market share and reduce operating cost (Jayawardhena and Foley, 2000). Digitalization

means banks are capable of providing faster, easier, cheaper and more reliable services to customers (Aladwani, 2001).

### **2.3 Customer experience**

Customer experience is the internal and individual customer response as a result of any direct or indirect interaction with a business organization (Meyer and Schwager, 2007). It is the customer's overall experience associated with the brand throughout the life cycle of the product or service offered (Schmitt, 2010). Businesses should adopt customers as continuous business imperative by formulating customer centric strategies across all segments of the organization, embracing technological advancement to increase overall value of its customer base, acquisition of new customers and retention of existing customers (Peppers and Rogers, 2016).

### **2.4 Customer satisfaction**

The satisfaction of Customer has been extensively researched many times but often associated with marketing. A customer is generally satisfied when the product or service purchased is better than expectation and is dissatisfied when performance does not match expectations or when actual experience supersedes expectations (Bolton and Drew, 1991). Kotler et al., (2006) states that; the buyer's satisfaction is dependent on the performance of the purchase to the customer's expectations. This expectation is not only limited to the product purchased but comprises service employees' behavior and interaction with touch-point, where a positive engagement exceeds the expectation thus level of customer satisfaction is positive.

### **2.4 Customer loyalty**

The conventional views on loyalty focuses on repeat purchase behavior and it can be segmented into four categories (Brown, 1953) which are undivided loyalty, divided loyalty, unstable loyalty and no loyalty. Loyalty is the degree of probability for a customer to repurchase a product or service from a company (Lipstein, 1959). Engel & Blackwell (1982) defined loyalty as "the customer's preferential, attitudinal and behavioral response towards a brand in a particular category over a period of time". Loyalty is a form of favoritism towards a brand that is resultant for consistent purchasing by the customer over a period of time. Engel & Blackwell (1982) was further supported by Keller (1993) suggesting loyalty exists where favorable attitude for a brand is translated via repetitive purchase.

### **2.5 Customer recommendation**

Customer recommendation which is also known as advocacy or word-of-mouth ("WOM") can be either positive or negative with correlation with the customer's satisfaction (Anderson et al., 1994). Recommendation is a strong influencing factor that can reduce customer alternatives, simplifying customer's choice (Rosen and Olshavsky, 1987) which in a banking environment can be revenue generation and cost reduction especially in customer acquisition. WOM has a dominant effect in customer adoption or switching of new product (Brown and Reingen, 1987). A study by Keaveney (1995) found that recommendation influenced new purchase decision in almost 50% of the case studies. According to Anderson et al, (1994) satisfied customers are most likely to have positive recommendation about an organization's product or services. Another factor that could influence recommendation is the reputation of the organization, where the higher reputation could result in better recommendation.

## 2.6 Customer effort

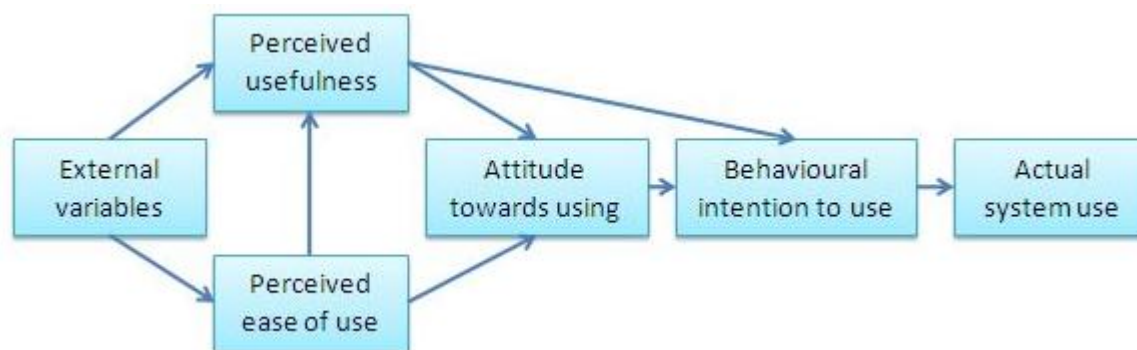
Effort is one of the elements considered to influence behavioral commitment in purchase decision making (Cardozo and Bramel, 1969). Woodside and Parish (1972) examined the amount of effort required for customers to search for information during the pre-purchase phase and concluded that effort may not be directly linked to satisfaction resulting from the product or service. Customer effort is simplistic term mean how much effort is required from the customer to get an issue resolved or to obtain a product or service that a business has to offer, it has direct correlation to predicting future customer behaviour (CEB, 2015). According to CEB, 81% of customers who claimed of high effort are likely to speak negatively about the company to others. Less effort would increase likeliness of customers to return, increase amount spend and have positive Word of Mouth (WOM), thus, increased loyalty.

## 2.2 Critical Review of Theories and Models

This research focusses on the impact of digitalization of retail banks in Malaysia on customer experience, hence; the technology acceptance model (“TAM”) as originally proposed by Davis (1989), the theory of reasoned action (TRA) as originally proposed by Fishbein and Ajzen (1975), and the theory of planned behavior (TPB) as originally proposed by Ajzen (1991) is applied to carry out this research.

### 2.2.1. Technology acceptance model (TAM)

TAM was proposed by Davis (1989) and since has become one of the common theoretical framework that is used to predict the acceptance and usage of new technology. It is widely accepted as it allows for the predictability of acceptability of a solution and the required refinements to make the solution much attractive and appealing to users.



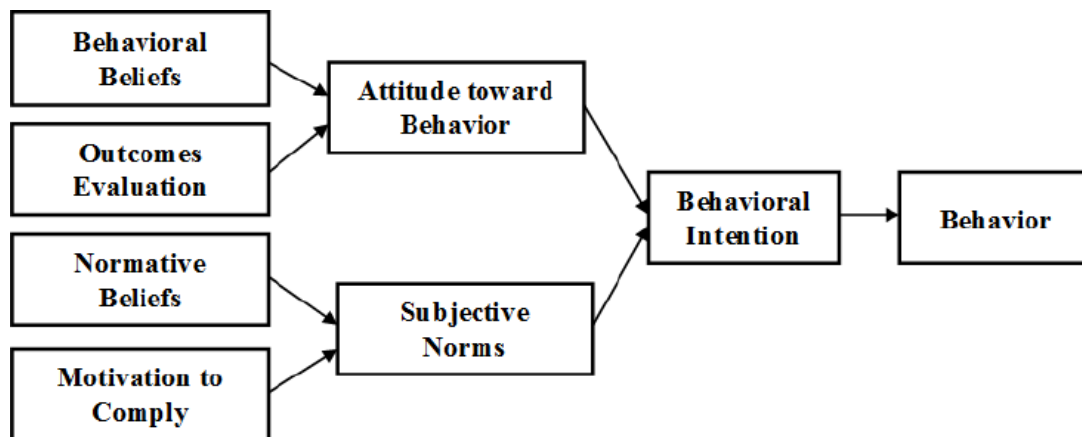
**Figure 1 Technology Acceptance Model - Davis (1989)**

This model states that system use is determined by perceived usefulness which a customer behavioral trait and perceived ease of use which drives the motivation and intention. These two are primary factors impacting user acceptance of the system. Perceived usefulness is defined as the extent a person believes using a particular system will elevate his or her performance. Perceived ease of use refers to the extent a person believes that using a particular system will be effortless (Davis et al., 1989). Perceived usefulness refers to how and what directly influences the user’s intention to use, while perceived ease of use has an indirect effect through perceived usefulness and attitude on the behavioral intention.

### 2.2.2. Theory of reasoned action (TRA)

The TRA was first introduced by Fishbein and Ajzen (1975) in the field of social psychology, is one of the fore leading theories used to examine and understand human

behavior (Venkatesh, Ramesh and Massey, 2003). According to TRA, there are two determinant factors that can be used to explain behavioral intention; the personal factor and social factor. Personal factor is the individual's attitude towards a specific behavior whereas social factor is the subjective norm surrounding the individual (Fishbein & Ajzen, 1975).

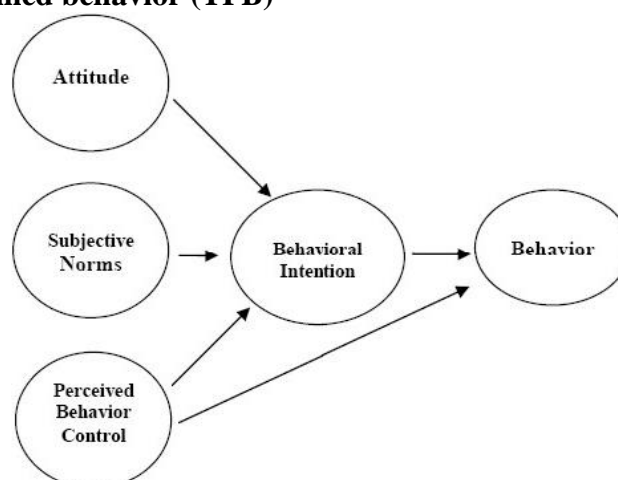


**Figure 2 Theory of Reasoned Action - Fishbein and Ajzen (1975)**

Attitude is defined as “an individual's positive or negative feelings (evaluative effect) about performing the target behavior” (Fishbein & Ajzen, 1975). Assumption is that a person will demonstrate a specific behavior when he or she perceives it positively. Attitude is determined by the person's beliefs about the behavior and consequences of performing the behavior and the evaluation of the outcome.

Subjective norm is explained as the person's perception on social pressure on whether to perform or not perform a specific behavior. It is a person's cumulative beliefs regarding a certain behavior and motivation to comply with important others (Fishbein & Ajzen, 1975). Important others might be the spouse, close friends, colleagues and neighbours. TRA has been adopted in many other studies especially when it involves technology and had proven as a strong predictor of human behavior ranging across various geographical locations.

### 2.2.3. Theory of planned behavior (TPB)



**Figure 3 Theory of Planned Behaviour - Ajzen (1985)**

The TPB was proposed by Ajzen (1985) as an extension of TRA (Fishbein & Ajzen, 1975) for circumstances where the individual does not have complete control of their behavior. The TPB states that attitude towards an intended behavior and subjective norms

actually influence the intention. A new element called the perceived behavioral control is introduced in addition to the influence of attitude and other normative factors. This antecedent influences behavioral intentions and actual behavior. However, an individual's performance of a certain behavior is based on intent.

## 2.3 Critical review of current research

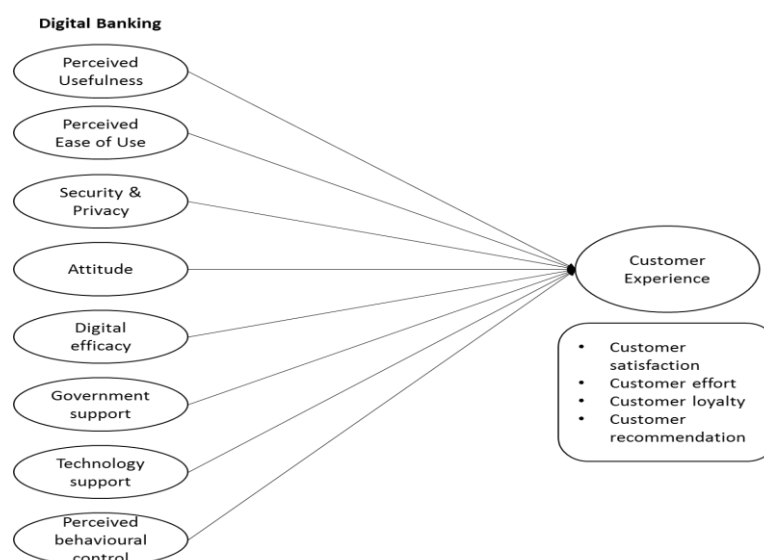
A study in Iran to examine the service quality dimensions in technology based banking's impact on customer satisfaction and loyalty was carried out by Mojoodi, Najafizadeh and Ghasemi (2013). The study was based on 560 respondents whose input was analyzed from the following perspectives, easiness, assurance, security, customization, comprehensiveness, convenience, support service and employee knowledge. From the common factor analysis, they concluded that service quality of digital banking positively impacts customer satisfaction and customer loyalty.

Kuo et al., (2016) researched the relationship among service quality, customer satisfaction and customer loyalty focusing on mobile shopping apps in Taiwan. 211 respondents were involved in this study. Seven dimensions were analyzed and in summary four of the seven having positive impact on customer satisfaction and three positive impact on customer loyalty.

Djajanto et al., (2014) researched the effect of self-service technology, service quality and relationship marketing on customer satisfaction and loyalty in Indonesia which involved 201 respondents. By using Partial Least Square analysis, they concluded the hypotheses that all three elements significantly effects customer satisfaction.

## 2.4 Conceptual Framework

After a thorough review of various theories and models, this research came up with a conceptual framework which is formulated to help achieved the desired result and aim of this research.



**Figure 4 Conceptual Framework**

## 2.4 Hypotheses

The dependent and independent variables will be analyzed based on the following hypotheses.

**H1:** *Perceived usefulness of digital banking positively influences customer experience.*

**H2:** *Perceived ease of use of digital banking platforms positively influences customer experience.*

**H3:** *Security and privacy of digital banking platform positively influences customer experience.*

**H4:** *Customer attitude toward digital banking tools positively influences customer experience.*

**H5:** *Digital efficacy of customers towards digital banking tools positively influences customer experience.*

**H6:** *Government support towards digital banking positively influences customer experience.*

**H7:** *Technology support on digital banking positively influences customer experience.*

**H8:** *Perceived behaviour control on digital banking positively influences customer experience.*

**H9:** *Intent to use digital banking platform positively influences customer experience.*

## 3.0 RESEARCH METHODOLOGY

There are different types of research method such as Qualitative, quantitative and mixed method; Qualitative research is used to explore correlations through respondents thought and opinion which potentially lead to discovery of further problem. Qualitative research is conducted to form better understanding of an issue by generating insights based on the problem or by creating hypotheses on the potential issue through semi structured or unstructured ways of gaining the information. On the other hand a mixed method combines quantitative and qualitative methods as approach is to focus on issues that gathers respondent input based on real life learning, experience and as well as cultural nuances. It is therefore time consuming to find the right and substantial number of respondents.

However, this research is empirical in nature; the quantitative method was chosen to collect quantifiable data, analyse and test the hypotheses to understand impact of digitalization of retail banks on customer experience.

The primary data collection was used to collect data directly from banking customers via a survey instrument which is the “questionnaire” to understand impact of digitalisation on customer experience. This research examines the impact of digitalization of retail banking on customer experience where survey was conducted on 250 banking customers within Klang Valley.

The questionnaire for this research was divided into 2 categories:

Part 1: Demographics characteristics (Total 8 questions)

Part 2: Data pertaining to key measures (Total 33 questions)

The Statistical Package for the Societal Sciences (“SPSS”) version 2.0 was used to analyze data collected.



## 4.0 RESULT, ANALYSIS AND DISCUSSION

### 4.1 Demographic Analysis

The first eight questions during the questionnaire were intended to obtain the demographic and characteristics of the 250 respondents. 57.6% of the respondents were male and the remainder female. These correspondents to a study by Malaysian Digital Association which illustrated 56.4% of internet population in Malaysia were male and 43.6% as females (MDA, 2016). Over 70% of the respondents were within the age of 30 to 50 which correspondents to the majority of the Malaysia working population (DoSM, 2016). Respondents constituting 86.8% are active internet banking users and 64.8% are mobile banking users. This statistics corresponds with BNM's statistics that shows internet banking penetration of 80% of July 2017. However, the mobile penetration rate amongst the respondents was almost double of that BNM's statistics of 33% as of the same period. Almost a quarter of the respondents were mid segment private sector employees and government employees respectively. This could be due to the locality the survey was conducted, within the central business district of Kuala Lumpur, Leboh Ampang and Bandar Puchong Jaya. More than half of the respondents are deemed to be digitally-savvy as they already use digital banking at least once a week in conducting their banking transactions. This corresponds with MCMC's study that 33% of internet usage in Malaysia is to performing banking transactions (MCMC, 2016). Less than 10% of the respondents do not use digital platform frequently, these could be the population that prefers face to face conventional banking. Distribution income level weighs towards middle income as 66.8% respondents were within the MYR 3000 – MYR 10000 brackets. This correspondents to Department of Statistics study in 2015; that showed the average income level of Malaysian to be at MYR 3500 (DoSM, 2016).

### 4.2 Data Normality Analysis

Normality test is done to determine two important elements; skewness and Kurtosis. Skewness is an indication if the data is balance and Kurtosis is indication of whether the data has peaked or remain flat. A common interpretation is that the data set is assumed normal and justified when the skewness and Kurtosis value falls between -1 and 1.

### 4.3 Data Reliability Analysis

Reliability test is an analysis to measure the consistency of the data in correlation with different items within the same test which allows for measurement of range reliability to determine estimation of range and discount other scales (Field, 2009). Cronbach's Alpha Coefficient is used to gauge reliability of the data set for this study where the following indicators are used (Bhatnagar et al, 2014):

**Table 1 Cronbach's coefficient alpha**

Cronbach's coefficient alpha	Indication
Above 0.9	Excellent
Between 0.7 to 0.9	Good
Between 0.6 to 0.7	Acceptable
Between 0.5 to 0.6	Poor
Below 0.5	Unacceptable

**Table 2 Data reliability test**

Variable	Number of item	Cronbach's Alpha
Perceived usefulness	3	0.974
Perceived ease of use	3	0.976
Security and privacy	3	0.954
Attitude	3	0.998
Digital efficacy	3	0.907
Government support	3	0.933
Technology support	3	0.929
Perceived behaviour	3	0.983
Intention to use	3	0.998
Customer Experience	4	0.973
<b>Overall</b>	<b>31</b>	<b>0.993</b>

Cronbach's alpha value in Table 2 is 0.993 which alludes that the data set from this study has excellent reliability in terms of internal consistency. The dependent variable which is customer experience has 4 items which are all above 0.90. The same applies to all other independent variables and the underlying 27 items where the alpha value is above 0.90. Thus all data set used for this study to determine impact of digitalisation of retail banking in Malaysia on customer experience is reliable.

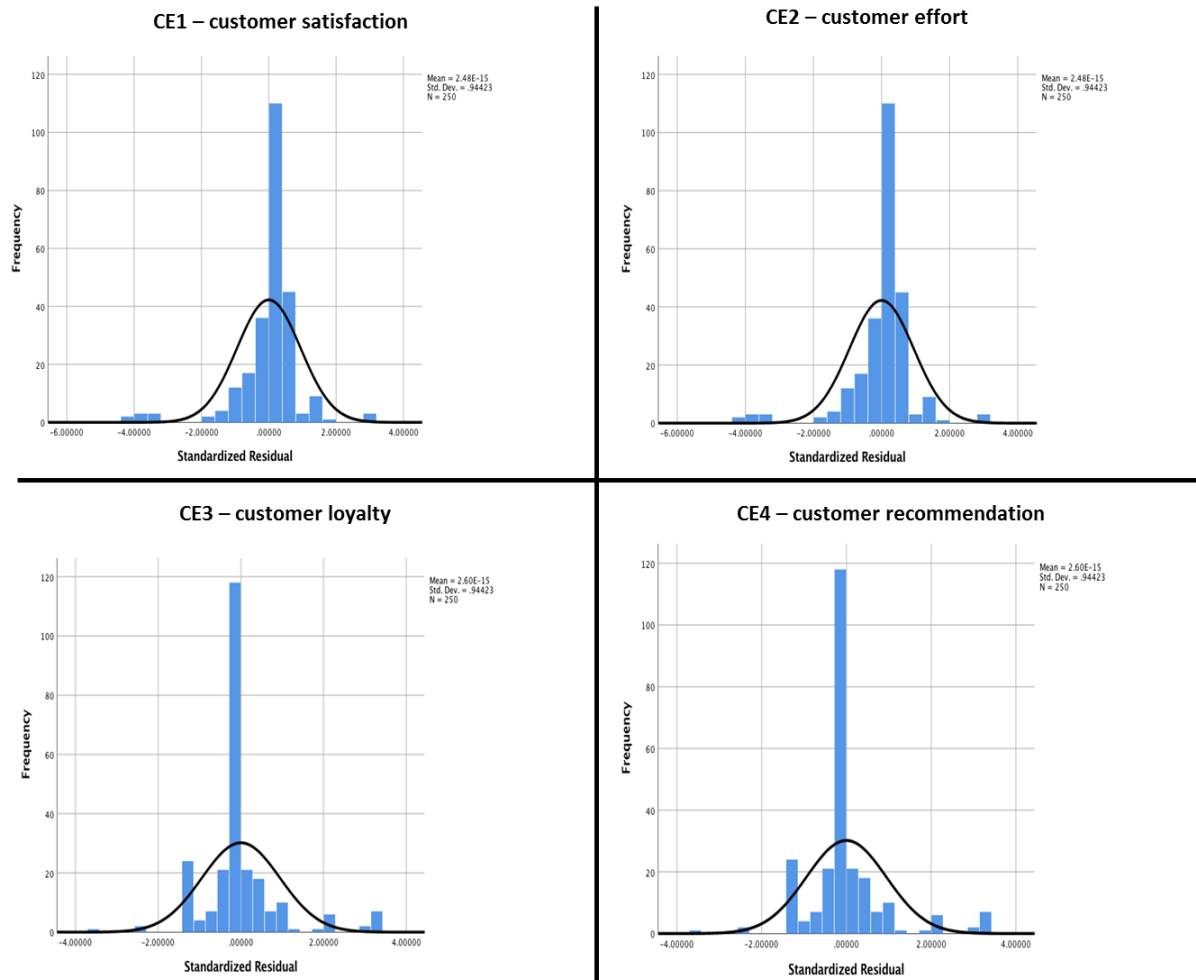
#### **4.4 Data Distribution Graph**

Normality of the dependent and independent variables will be further tested using histogram, p-plots and scatter plot to determine if all the variables are well balanced.

##### **4.4.1 Histogram**

Histogram was used to examine data value's distribution, observation from the shape of distribution and any outlier values (Hair et al. 2006). Histograms are simple graphical tool that help to demonstrate quantitative information and interpretation of histograms can be used for research writing, strategy evaluation.

The regression standardized residual of customer experience has a normal bell-shaped curve that is symmetric to the centre. Therefore the data set for this study is normally distributed. Further breakdown of the four items that makes up for customer experience, which are customer satisfaction, customer effort, customer loyalty and customer recommendation all indicate similar patters as indicated in Figure 6.



*Figure 5 All CE component regression standardized residual*

#### 4.5 Descriptive Analysis

Data set that is used in an analysis is explained further using descriptive analysis which includes more details and summarization of data variables in a more understandable format (Larson, 2006). a statistical analysis enables large data to be presented in a logical manner that is easier to be interpreted using numerical calculations and graphics. Descriptive analysis was used to define the mean and standard deviation on the survey respondents and variables in the questionnaire.

**Table 3 Descriptive analysis of all variables**

Variable	N	Mean	Std. Deviation
Customer experience	250	2.42	1.1046
Perceived usefulness	250	2.13	0.9891
Perceived ease of use	250	2.34	1.1344
Security & privacy	250	2.86	1.1694
Attitude	250	2.28	1.1546
Digital efficacy	250	2.54	1.1072
Government support	250	2.22	0.9881
Technology support	250	2.19	0.9515
Perceived behaviour control	250	2.23	1.1181
Intent to use	250	2.27	1.1457

From the Table 3 above, security and privacy has the highest mean with 2.86 with a

standard deviation of 1.1694 which means respondents mention this factor to have the highest impact on customer experience. This corresponds to findings by Saleh (improving security of online banking using RFID, 2011) who stated users of online banking platforms expect banks' to provide all necessary measures to ensure customer information transmitted is safe and secure.

#### 4.6 Correlation Analysis

Correlation between variables is tested using the Pearson correlation coefficient as in order test the validity of the hypotheses. Relationship between variables can be illustrated by their closeness to the Pearson correlation coefficient (defined as 'r') whether it is towards positive (+1) or negative (-1). As part of this study, examination is based on how the independent variables impact the dependent variable, which is customer experience and analysis of the relationship between these variables. Four items that are customer satisfaction, customer effort, customer loyalty and customer recommendation define customer experience.

All 8 independent variables have very high correlation towards customer experience as the Pearson correlation value ranges from 0.718 to 0.969. They are also significant as the P value is consistently 0.000 across all variables.

#### 4.7 Regression Analysis

Another statistical analysis used in this study is the Durbin-Watson value, which according to Bakon and Hassan (2013) the range of 1.5-2.5 indicates a good correlation.

**Table 4 Regression analysis summary for overall CE**

Model Summary <sup>b</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.986 <sup>a</sup>	0.972	0.971	0.18833	0.261
a. Predictors: (Constant), IntentUse, TechnologySupport, SecurityPrivacy, GovernmentSupport,					
b. Dependent Variable: CustomerExperience					

As per Table 4, R Square value of 0.972 translates to 97.2% of the dependent variables can be predicted by the independent variables. The adjusted R Square value of 0.971 indicates this is a good fit model as the value is above 60% (Zymont and Smith, 2014). The Durbin Watson value is 0.261 which does not follow the acceptable range of 1.5-2.5 (Bakon and Hasan, 2013). This means there could be correlation amongst the selected respondents which could be the case given the selection was done to close vicinity of banking halls in central business district in Leboh Ampang and Bandar Puchong Jaya.

**Table 5 Regression analysis summary for customer satisfaction**

Model Summary <sup>b</sup>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.990 <sup>a</sup>	0.979	0.978	0.158	0.615
a. Predictors: (Constant), IU3, DE3, GS2, TS2, SP3, TS3, DE2, TS1, SP2, GS1, GS3, PBC2, SP1, DE1, PBC1, AT2, PBC3, AT1, IU2, IU1, AT3					
b. Dependent Variable: CE1 (Customer Satisfaction)					

97.9% of the customer satisfaction can be predicted by the independent variables. It is a good fit model as the adjusted R square value is above 60%. There could be auto-correlation between the respondents as the Durbin-Watson value is not within the acceptable range.

**Table 6 Regression analysis summary for customer effort**

<b>Model Summary<sup>b</sup></b>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.979 <sup>a</sup>	0.959	0.955	0.232	0.597
a. Predictors: (Constant), IU3, DE3, GS2, TS2, SP3, TS3, DE2, TS1, SP2, GS1, GS3, PBC2, SP1, DE1, PBC1, AT2, PBC3, AT1, IU2, IU1, AT3					
<b>b. Dependent Variable: CE2 (Customer Effort)</b>					

95.9% of the customer effort can be predicted by the independent variables. It is a good fit model as the adjusted R square value is above 60%. There could be auto-correlation between the respondents as the Durbin-Watson value is not within the acceptable range.

**Table 7 Regression analysis summary for customer loyalty**

<b>Model Summary<sup>b</sup></b>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.976 <sup>a</sup>	0.952	0.948	0.265	0.413
a. Predictors: (Constant), IU3, DE3, GS2, TS2, SP3, TS3, DE2, TS1, SP2, GS1, GS3, PBC2, SP1, DE1, PBC1, AT2, PBC3, AT1, IU2, IU1, AT3					
<b>b. Dependent Variable: CE3 (Customer Loyalty)</b>					

95.2% of the customer loyalty can be predicted by the independent variables. It is a good fit model as the adjusted R square value is above 60%. There could be auto-correlation between the respondents as the Durbin-Watson value is not within the acceptable range.

**Table 8 Regression analysis summary for customer recommendation**

<b>Model Summary<sup>b</sup></b>					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.970 <sup>a</sup>	0.941	0.936	0.325	0.689
a. Predictors: (Constant), IU3, DE3, GS2, TS2, SP3, TS3, DE2, TS1, SP2, GS1, GS3, PBC2, SP1, DE1, PBC1, AT2, PBC3, AT1, IU2, IU1, AT3					
<b>b. Dependent Variable: CE4 (Customer Recommendation)</b>					

94.1% of the customer recommendation can be predicted by the independent variables. It is a good fit model as the adjusted R square value is above 60%. There could be auto-correlation between the respondents as the Durbin-Watson value is not within the acceptable range.

Other analysis that was carried out is the coefficient analysis which Perceived Usefulness, Technology Support and Intent to Use have a negative relationship with Customer Experience whereas the other independent variables have positive relationship. These three independent variables also have insignificant impact on customer experience as indicated by the significance p value >0.05. These two statistical metrics is used to acknowledge and nullify the nine hypotheses drawn up in Chapter 2.

## 5.0 CONCLUSION

The key purpose of this research case was to study the impact of digitalization of retail banks in Malaysia on customer experience. Research was evaluated based on nine customer paradigm, perceived usefulness of digital banking, perceived ease of use of digital banking platforms, security and privacy of digital banking, customer attitude towards digital banking, customers digital efficacy, government support towards digital banking, technological advancement and support towards digital banking and customers' perceived behavioural control on digital banking. Customer experience was examined from four aspects, customer satisfaction, customer effort, customer loyalty and customer recommendation. Convenient sampling of 250 respondents was used as part of the research study. Respondents were picked at random within the central business district of Leboh Ampang and Bandar Puchong Jaya.

This research leads to the notion that perceived usefulness of digital banking applications and platforms has negative influence ( $b = -0.042$ ) on customer experience. With a value of  $r > 0.05$  rendering perceived usefulness to have insignificant impact on customer experience. Thus leading to rejection of H1 that perceived usefulness of digital banking positively influences customer experience. Perceived ease of use of digital banking platforms positively influences customer experience ( $b = 0.124, r = 0.003$ ) leading to acceptance of H2. Security and privacy of digital banking does positively influence and high significance on customer experience ( $b = 0.168, r = 0.000$ ). Similarly customer's attitude towards digital banking tools have positive influence and high significance on customer experience ( $b = 0.224, r = 0.002$ ). Customers whom are equipped with knowledge on how to use digital banking tools feel it helps to improve their experiential journey with the bank. H5 is accepted as digital efficacy of customers towards digital banking tools positively influences their experience with their bank ( $b = 0.339, r = 0.000$ ). Government support towards digital banking does positively influence customer experience ( $b = 0.066, r = 0.047$ ) thus validating H6. Technology advancement and support has negative influence and is insignificant towards customer experience ( $b = -0.003, r = 0.918$ ) resulting in H7 being rejected. Customer's perceived behavioural control on digital banking does positively influence customer experience ( $b = 0.186, r = 0.038$ ) proving H8 to be correct. H9 is rejected ( $b = -0.036, r = 0.528$ ) where customer's intent to use digital banking platform has negative influence and insignificant on customer experience. However these outcomes were not compared with any other established study due to nonexistence of a study that researches the impact of digitalisation on customer experience holistically.

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