CUSTOMER PERCEIVED VALUES, SKILL-BASED HABITS AND
AVAILABILITY OF RESOURCES TOWARDS BEHAVIORAL LOYALTY OF
GENERATION Y SMARTPHONE USAGE

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DEDICATION

This thesis is dedicated to my father Ridwan Arahman and my mother Rahmadiah who always love me and support me unconditionally and who have taught me patience and sincerity in facing any difficulties in life. This thesis is also dedicated to my sisters Rachmi Shintya and Shela Tri Yunita who have been source of encouragement and filled my life with joy and happiness during this challenging time.

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ABSTRACT

Developing a better understanding of what drives consumers' loyalty towards smartphone brand has become an important issue for academics and practitioners. This issue is even more challenging and crucial for Gen Y smartphone users as they are not only the largest population compared to other generations, but they are also classified as the most unpredictable and less loyal cohort. By integrating three theories which are Consumption Value Theory, Means-End Theory, and Cognitive Lock-in (Skill-Based Habit) Theory, this study aims to evaluate the relationships between perceived consumption values, perceived cost value, customer skill-based habit, facilitating condition, and personal innovativeness toward behavioural loyalty. A quantitative approach using questionnaire survey and purposive sampling method were adopted in this study. A total of 272 samples of Malaysian Gen Y smartphone users were involved in this study. The data were analysed using Partial Least Squares - Structural Equation Modelling (PLS–SEM) technique via SmartPLS 3.0 software. The findings of this study indicated that the effect of facilitating condition on behavioural loyalty was fully mediated by perceived consumption value. While customer skill-based habit was found to only have indirect influence on behavioural loyalty via perceived consumption value. The mediating role of perceived cost value in the relationship between perceived consumption value and behavioural loyalty was not supported in this study. Furthermore, the findings of this study also revealed that there was no moderating effect of personal innovativeness in the relationship between perceived consumption value and behavioural loyalty, and also in the relationship between perceived cost value and behavioural loyalty. Across all the variables tested, customer perceived value remains as key factor in influencing behavioural loyalty particularly among Gen Y smartphone users. The findings of this study suggest that the improvement on the factors such as facilitating condition and customer skill-based habit could result in better value perception, thus increase loyalty level.

ABSTRAK

Membangunkan pemahaman yang lebih baik mengenai apa yang mendorong kepada kesetiaan pengguna terhadap jenama telefon pintar telah menjadi satu isu penting kepada golongan akademik dan pengamalnya. Isu ini dilihat lebih mencabar dan penting kepada pengguna telefon pintar Gen Y kerana mereka bukan hanya kumpulan pengguna terbesar berbanding generasi lain, tetapi mereka juga diklasifikasikan sebagai golongan yang paling sukar dijangka dan kurang setia. Dengan menggabungkan tiga teori iaitu Teori Nilai Penggunaan, Teori *Means-end*, dan Teori *Lock-in* Kognitif (Kebiasaan Berasaskan Kemahiran), kajian ini bertujuan untuk mengkaji hubungan antara tanggapan nilai penggunaan, tanggapan nilai kos, kebiasaan berasaskan kemahiran pelanggan, keadaan yang memudahkan, dan inovasi peribadi terhadap kesetiaan perilaku. Pendekatan kuantitatif mengunakan borang soal selidik dengan kaedah pensampelan bertujuan digunakan dalam kajian ini. Seramai 272 responden pengguna telefon pintar di kalangan Gen Y terlibat dalam kajian ini. Data dianalisis menggunakan Teknik Model *Partial Least Squares (PLS–SEM)* melalui perisian SmartPLS 3.0. Hasil dari kajian ini menunjukkan bahawa kesan keadaan yang memudahkan terhadap kesetiaan perilaku telah diperantara sepenuhnya oleh tanggapan nilai penggunaan. Manakala kebiasaan berasaskan kemahiran pelanggan didapati hanya mempunyai pengaruh terhadap kesetiaan perilaku secara tidak langsung melalui tanggapan nilai penggunaan. Peranan tanggapan nilai kos sebagai perantara dalam hubungan antara tanggapan nilai penggunaan dan kesetiaan perilaku pula tidak disokong dalam kajian ini. Selain itu, hasil kajian ini juga menunjukkan bahawa tidak ada kesan penyederhanaan oleh inovasi peribadi dalam hubungan antara tanggapan nilai penggunaan dan kesetiaan perilaku, dan juga dalam hubungan antara tanggapan nilai kos dan kesetiaan perilaku. Di antara kesemua pemboleh ubah yang diuji, tanggapan nilai penggunaan kekal sebagai faktor utama dalam mempengaruhi kesetiaan perilaku khususnya di kalangan pengguna telefon pintar Gen Y. Hasil kajian ini mencadangkan penambahbaikan faktor-faktor seperti keadaan yang memudahkan dan kebiasaan berasaskan kemahiran pelanggan untuk mewujudkan tanggapan nilai penggunaan yang lebih baik, sehingga meningkatkan tahap kesetiaan.

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LIST OF ABBREVIATIONS

AVE - Average Variance Extracted

CR - Composite Reliability

DV - Dependent Variable

E-WOM - Electronic Word-of-Mouth

HTMT - Heterotrait-Monotrait Ratio of Correlations

IDC - International Data Corporation

IV - Independent Variable

MCMC - Malaysian Communications and Multimedia Commission

OS - Operating System

PERVAL - Perceived Value

PIIT - Personal Innovativeness in Domain of Information
Technology

PLS-SEM - Partial Least Squares-Structural Equation Modelling

SBH - Skill Based Habit

SPSS - Statistical Package for Social Sciences

TAM - Technology Acceptance Model

UTAUT - Unified Theory of Acceptance and Use of Technology

USP - Universal Service Provision

CVT - Consumption Value Theory

SBHT - Skill-Based Habit Theory

MET - Means-End Theory

PCV - Perceived Consumption Value

CV - Cost Value

FV - Functional Value

EV - Emotional Value

ISV - Interaction Support Value

EpV - Epistemic Value

SV - Social Value

BL - Behavioral Loyalty

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CHAPTER 1

INTRODUCTION

1.1   Introduction

Customer loyalty has been regarded as the most important topic in marketing literature since decades ago. Recent researches have shown a great interest in developing customer loyalty in different field of studies such as in e-commerce (Chiu et al., 2014), mobile phone (Yeh et al., 2016; Hur et al., 2015), tourism (Eid, 2015), online game (Rezaei and Ghodsi, 2014), in financial context (Ramaswami and Arunachalam, 2016; Floh et al., 2014), and many more. Indeed, there are many benefits of having loyal customers. Previous studies have proven that loyal customers do not only repurchase the same brand in the future, but also willing to pay with premium price and willing to spread positive word-of-mouth communication with other potential customers (Rezaei and Ghodsi, 2014; Evanschitzky et al., 2012; Pura, 2008). However, researchers on customer loyalty have been found to widely adopt varying conceptualization and operational approaches which complicates the researchers in understanding the construct (Watson et al., 2015). Furthermore, due to the inconsistency results found in the previous studies and no agreement on conceptualizing and operationalizing the loyalty construct, it limits a comprehensive understanding of customer loyalty and prevent the generalization of research findings (Pan et al., 2012).

Despite the wide interest on the customer loyalty topic, literatures in marketing studies have shown that customers nowadays are less loyal compared to the past (Pan et al., 2012). Although customer satisfaction has been considered to be the main driver of customer loyalty, however previous study has shown that the link between satisfaction and customer loyalty is not as strong as it is believed (e.g. variance explained by just satisfaction is small) (Kumar et al., 2013), while others have failed to prove the strong relationship between satisfaction and customer loyalty (e.g. Stoel

et al., 2004; Khatibi et al., 2002). The study of Nagengast et al. (2014) further has demonstrated that satisfied customers may no longer become loyal when the switching cost is low, which suggests that the customers nowadays tend to forego a potential gain from the current brand and willing to switch to another brand in order to reduce the cost.

The declining of customer loyalty can clearly be seen in industry that has highly competitive level such as in smartphone industry. The Nokia brand for example, it has been reported that the Nokia market share dropped from 38.8 % in 2009 to 6.6 % in 2012 after the new smartphone operating system called Android has been introduced (Statista, 2018). Similarly, the Blackberry brand has been reported to have 0 % market share in 2016 (Gartner, 2017). The intense competition and the fast-new product introduction in smartphone industry have forced the company to focus on delivering superior value to the customers in order to sustain in the market (Yeh et al., 2016).

Smartphone industry can be considered as one of the fast-growing industries in the world. The country such as China and India have been reported to have rapidly growing economy and it holds about 50% combined of the global smartphone market share in 2017 (Statista, 2017). Similarly, the smartphone usage in Malaysia has shown an increase from 14% in 2004 to 53.4 % in 2014 (Malaysian Communication and Multimedia Commissions, 2015). Therefore, with the intense competition and fast-growing market in the world and particularly in Malaysia, it is important to look at the factors and to understand the customer purchase behaviour pattern towards the smartphone in order to build customer loyalty. The present study aims to provide a better insight in building customer loyalty among smartphone users in Malaysia.

1.2 Background of Study

Retaining customers are becoming more challenging for business, especially for those which are highly competitive in the market whereby the customers become more critical and more demanding in order to get the product or service that is best for them. As many alternatives are widely available in the market, the customers are found to be more sensitive about the product or service failure which make them prone to switch to another brand when they are disappointed (Liang et al., 2013), or even when there is an opportunity such as promotions from competing brand (Omotayo et al., 2011).

This phenomenon therefore has led most of the companies to focus on not only satisfying their customer by fulfilling their needs, but more importantly is to make sure that such satisfaction also leads to loyalty. Building customer loyalty is crucial as it is perceived to be the key success to gain competitive advantage (Yap et al., 2012). Indeed, loyal customer has been proven to have great impact on the company profitability. Previous studies have reported that an increment of 5% in retaining customers may result in increasing the profit up to 125% (Martínez, 2015). While the study of Petrick (2004) has argued that the cost of retaining the existing customer is six times cheaper than to attract new ones.

It has been a decade ago that the competitive scenario in smartphone industry has experienced a great change in its history. The introduction of new operating system called Android in 2007 has made not only the use of smartphone become more sophisticated than before, but also has created a big opportunity for new comers to come into the market. Today, there are at least 60 smartphone brands in the world in which the 81.7 % of the world population are using Android as their smartphone system (Gartner, 2016). The increasing of alternatives that are widely available in the market therefore has made a big challenge for both international and local smartphone vendors in retaining their customers. Survey has reported that smartphone industry was among the top 100 brands in the world that has greatest losses in loyalty (e.g. Nokia and Blackberry) (Miller, 2011). Furthermore, the survey conducted by Autralian research firm Telsyte revealed that the switching activity does not only occur between

different operating system, but also within the Android handset as there are many smartphone vendors use Android as their smartphone operating system (The Australian, 2015).

According to Pew Research Center (2016), the increasing of smartphone use does not only experience by the consumer in developed countries such as United States and major European Nations, however the developing countries also show the significant increase of the use of smartphone, one of them is Malaysia. It was reported that the sales of smartphone in Malaysia was increasing by 16% from 47% in 2012 to 63% in 2013 (Ericson Consumer Lab, 2013). Malaysia was recognized to have the second highest mobile phone penetration in Asia by 80% after Singapore which has 87% mobile phone penetration in 2013 (Ericson Consumer Lab, 2013). Malaysia has reached its highest number of mobile phone market penetration by 140% in 2014 (World Bank, 2014). There are more than 47% of the users have multiple handsets, while 80% of them are smartphone users (Nielsen, 2014). Nowadays, the number of smartphone users in Malaysia has reached 16.4 million from 30.9 million of its population and it is predicted that the number of smartphone users in Malaysia will reach 23.31 million in 2022 (Statista, 2017).

The distribution of smartphone in Malaysia has also covered the consumer in rural area, although the number of smartphone users in rural area is still small compared to the users in urban area. As reported by MCMC (2015), 62.3 % of smartphone users in Malaysia are living in urban area while 37.7% of them are living in rural area in 2014. Nevertheless, it is predicted that the number of smartphone users in Malaysia particularly in rural area will keep increasing from time to time. As reported by Malaysian Communications and Multimedia Commission (2013), the Government of Malaysia has developed key strategies to reduce the digital divides in the country, among those is to provide the Internet access and to encourage the use of smartphone in rural area which is known as 1Malaysia Wireless Village. Despite the Notional-level progress is on track, however the gaps still exist along urban/rural, ethnic, and geographic lines (UNICEF Malaysia, 2014). With the growth about 2.5 % a year, it is predicted that Malaysia will have 90% Internet penetration by year 2020 (Jailani, 2018).

According to Malaysian Communication and Multimedia Commissions (MCMC) (2015), the smartphone users in Malaysia are dominated by young people with average age of 29.7 years old. It was reported that 73.1 % of all users are adults (20 – 49 years old), 12.5% are pre-teens and teens (19 years old and below), and 14.4% are seniors (50 years old and above) (MCMC, 2015). These young people or more known as "Generation Y" can be considered to play important role in smartphone industry not only because of their population are the biggest compared to other generations (Nielsen, 2016), but also they were born in the technology era (1980s-1990s) thus known as the most visually sophisticated of any generations or technology savvy (Bolton et al., 2013). Furthermore, with the support from the government, the use of smartphone among young generation in Malaysia can be predicted to keep increasing from time to time as the government offered up to RM2, 500 tax relief and RM400 rebate for purchasing smartphone (Inland Revenue Board of Malaysia, 2017).

Previous studies have also reported that besides the personal needs and the government support, the increasing number of smartphone users in Malaysia particularly among the young generations is also influenced by many other factors. The study of Osman et al. (2012) has specifically focused on identifying the factors in adopting smartphone use in Malaysia. The study revealed that from the survey of 1814 smartphone users, 77% of the users were in the age between 17-36 years old which falls into Gen Y customer type. The study reported that 35% of the respondents purchasing smartphone because of the trend in community, following by the needs (34.4%), software (33.1%), cost of plan (28.8%), hardware (17.6%), signal reception (11%), and others (3.5%). The study further revealed that the design of smartphone was the most important specification particularly for the young users compared to older users when considering to purchase smartphone (56%), following by built-in wi-fi adapter (38.5%), computing power (34.2%), price (30.2%), screen size (28.5%), brand (22.2%), operating platform (12.3%), and others. In addition to that, the invisible factor such as computing power is also perceived to be more important for young users compared to older users which indicates that younger users in Malaysia are likely to pay more intention on the technical aspects or the performance of the smartphone. Hence, the continuous effort from the smartphone manufacturers to provide superior value to its customers can be considered to be crucial in keeping their existing customer from the competitors.

Literatures in marketing have pointed out that the key success of generating customer loyalty is by creating superior value to the customers (Chen, 2015; Parasuraman and Grewal, 2000). Furthermore, previous study of Holbrrok (2001) has also asserted that the comprehensiveness of perceived value concept that covers various aspects of consumption experience has made it as the basis as well as key strategies in all marketing activities. While other studies have also argued that perceived value is more appropriate than other constructs in understanding user's behavior in IT and IS field (Yu et al., 2017), it is more stable judgments than either quality or satisfaction (Dumana and Mattila, 2005), and it supplants the role of customer satisfaction in measuring loyalty and suggested on omitting satisfaction construct as better fit of the research model (Lin et al., 2005).

According to the Consumption Value Theory (Sheth et al., 1991), the customers often make a decision based on the judgement from various value elements such as functional value, emotional value, social value, epistemic value, and conditional value. Previous studies have also established that customers often rely on at least three elements of value during the consumption experience such as functional value, emotional value, and social value (Yeh et al., 2016, Yu et al., 2013, Sweeney and Soutar, 2001).

In general, despite the comprehensiveness of perceived value in appertaining various aspects of consumption experience, however it is still insufficient to build customer loyalty. Given the inconsistent of the findings from previous studies on perceived value-behavioral loyalty relationship, many researchers have sought the correlation among perceived value components for better understanding of its effect on behavioral loyalty. While others have also suggested to adopt another variable that is perceived as crucial in the context that is being studied in order to have clear picture regarding the prediction of perceived value on customer loyalty. In this regard, personal trait factor such as innovativeness (Rogers et al., 2009) and also the inhibition factor such as habit (Murray and Haubl, 2007) have been argued to be crucial in understanding the behavioral intention in ICT context. These variables in fact have been received tremendous attention in the recent ICT related studies (Huang, 2018; Yu et al., 2017; Hsiao et al., 2016; Yang et al., 2016).

In general, it can be asserted that there is no single strategy that can build customer loyalty effectively and especially for long term goal, but it is all about combining all the strategies that complement to each other. Furthermore, the adopted strategy should be specific about the product that manufacturer focus on as each product has unique characteristic thus requires different strategy. Studies have also shown that different type of customers (different generations) have different perception about the product, thus needs different strategy in order to retain them (Valentine and Powers, 2013). For these reasons, the present study therefore is motivated to bridge the research gap by focusing on investigating the relationship between customer perceived consumption value, customer habit, customer innovativeness, and customer loyalty among Generation Y smartphone users in Malaysia Context.

1.3 Problem Statement

1.3.1 Lack of Empirical Studies in Smartphone Context in Malaysia

The use of smartphone has been perceived to be important for most Malaysian to remain connected. Malaysia has been reported to experience rapid growth of smartphone users by average growth of 8% each year from 14% in 2010 to 75.9% in 2017 (MCMC, 2017). Nowadays, the smartphone users in Malaysia has reached 16.4 million from 30.9 million of its population and it is predicted to keep increasing to reach 23.31 million of smartphone users in 2022 (Statista, 2017). Despite the increasing number of smartphone users in Malaysia, however the study that investigates the factors affecting behavioral loyalty of smartphone users in Malaysia is still limited.

For example, the study of Bakon and Hassan (2013) investigated the influence of customer perceived value on student deviant behavior and academic performance. Meanwhile, the study of Maghnati et al., (2012) examined the influence of experiential marketing on experiential value that involved Malaysian (67.8 %) and non-Malaysian (32.2 %) smartphone users. Another study such as Ting et al. (2011) has focused on

the effect of smartphone dependency on purchase behavior among young users in private universities. Whereas other studies such as Shabrin et al. (2017), Rahim et al. (2016), and Hew et al. (2012) have focused on the factors influencing the smartphone purchase intention among young users.

According to Statista report in 2017, the average of smartphone replacement cycle in Malaysia is about 22 months. While, Malaysian Communications and Multimedia Commission (2015) has also reported that 38.8% of smartphone users in Malaysia change their smartphone within 12 months period. Furthermore, it has also been reported that 22.8 % of smartphone users in Malaysia are having smartphone more than one unit. With the short lifecycle of smartphone usage and the increasing number of competitors in smartphone industry, retaining the existing customers from the competitors therefore has become top priority for manufacturer in smartphone industry, particularly in Malaysia market (Aulia et al., 2017). Hence, there is a need for study that focus on investigating factors in influencing behavioral loyalty among smartphone users in Malaysia context.

1.3.2 The Need to Focus on Building Customer Loyalty on Gen Y Customers in Malaysia

Generation Y has been regarded as the largest population as well as the most potential and beneficial customer among other generations particularly in mobile technology context such as smartphone (Pew Research, 2019; Nielsen, 2016). This is because they do not only have high purchasing power and willing to spend more money in order to get the product or brand they like (Deloitte, 2018), but they also have fast capability to learn and adopt with new technology (Smith, 2012; Ang et al., 2009).

In Malaysia, the number of smartphone users has increased rapidly whereby more than 50 % of smartphone population is filled by generation Y (MCMC, 2017; MCMC, 2015). However, the survey conducted from previous study that involved 1710 smartphone users in Malaysia has found that only 13.3 % of them are loyal to

their brand whereby 59.3% of the users falls into generation Y category (Karim et al., 2009). Moreover, previous mobile technology studies have also reported that generations Y is the most unpredictable and less brand loyal compared to their predecessor (Chuah et al., 2017). While other studies have noted that Gen Y smartphone users in Malaysia change their smartphone more frequent than other technology devices (Ling, Goyindan, and Radhakrishnan, 2018), they are known as consumption orientations and risk-taking individuals (Maryama et al., 2019).

Previous study of Valentine and Powers (2013) has suggested that generation Y responds to the marketing tactics differently compared to other generations, thus the manufacturer should imply different strategy to different customer generation. In addition, the study of Kandampully et al. (2015) has also called for future study to investigate the factors that can engage Gen Y customer and fostering their loyalty in technology context. Considering this gap, hence there is a need for study to investigate the factors affecting customer loyalty among smartphone users in Malaysia particularly in young generations context.

1.3.3 The Need to Extend Customer Perceived Value Theory in Smartphone Context

As smartphone market becomes increasingly competitive, previous studies have acknowledged that the best core marketing strategy to retain the existing customer is to offer superior value to the customer (Zauner et al., 2015; Haas et al., 2012; Karjaluoto et al., 2012). Consumption Value Theory of Sheth et al. (1991) has postulated that different customers may have different perception of value in different context of use, thus will generate different outcome or different behavioural intention. Accordingly, previous studies in smartphone context have called for future study to investigate the role of contextual factor (e.g. time, location, events, etc) in influencing the perception of value and its outcomes (Wang et al., 2013; Gummerus and Philstrom, 2011; Pura, 2008).

In this regard, the contextual factor such as facilitating condition has been considered as important factor in mobile technology studies because it directly determines the usage of mobile technology such as smartphone (Venkatesh et al., 2016; Venkatesh et al., 2012). In Malaysia, the different level of infrastructure development also exists in different location (Statista, 2015), which indicates that facilitating condition factor may play important role in influencing the perception of smartphone value among Malaysian smartphone users. Accordingly, this study argues that effect of perceived value on its outcomes is likely to give less convincing or less accurate result when facilitating condition factor is neglected in the research model.

In addition, previous mobile technology related studies have also demonstrated that the adoption of new technology (new product) is strongly influenced by customers level of innovativeness – the willingness to try new technology – (Kim et al., 2014; Park et al., 2013), and the customers with high innovativeness has been found to be willing to switch to another product or service compared to those with low innovativeness (Jianlin and Qi, 2010). Given a persistent and general nature of personal innovativeness in trying out and accepting innovations across multiple technologies, therefore it can be argued that the effect of perceived value on customer loyalty may also vary depending on the level of customer innovativeness. To the best of author knowledge, the study that investigates the influence of facilitating condition on perceived value and the moderating role of personal innovativeness in the relationship between customer perceived value and customer loyalty is hardly found.

1.3.4   The Need to Extend Cognitive Lock-in (Skill-Based Habit) Theory in Smartphone Context

Previous studies have suggested that consumer habit is important factor in predicting behavioural intention in mobile technology context such as smartphone (Amoroso and Lim, 2017; Hsiao et al., 2016; Venkatesh et al., 2016; Hsu et al., 2015). Another study further has argued that habit has stronger effect on customer loyalty compared to other constructs related to perceived value in IT and IS context (Hsiao et al., 2016; Järvinen et al., 2016; Olsen et al., 2013; Chiu et al., 2012) and satisfaction

(Amoroso and Lim, 2017; Zhang et al., 2015). According to Cognitive Lock-in (Skill-Based Habit) Theory, the skill from using technology such as smartphone will gradually develop and become habit or known as skill-based habit that cannot be transferred to other technology, which will increase the level of loyalty once it is developed through the increasing of perceive of use (Murray and Haubl, 2007).

The conceptualization of habit from skill-based perspective can be considered as crucial in understating the mechanism of lock-in effect of habit in decision making process (Labrecque et al., 2017; Murray and Haubl, 2007). This is particularly more important in the context of Gen Y customers as they can be considered as more skilful than other cohorts in using technology such as smartphone (Valentine and Powers, 2013). Survey has reported that more than 80% of Malaysian Gen Y have high dependency on their smartphone (MCMC, 2017). In addition, Gen Y are also found to have more frequent and more consistent of doing activities relating to smartphones than older generations (Anshari et al., 2016). Accordingly, the frequent use of smartphone among Gen Y customers may gradually develop skill-based habit and influence their loyalty (Labrecque et al., 2017).

In addition, since skill-based habit has been argued to influence customer loyalty through the increasing of perceive of use (Murray and Haubl, 2007), it is also important to investigate the effect of skill-based habit on other value dimension to better understand the mechanism of its lock-in effect on customer loyalty. Given a persistent of Gen Y customers in using technology such as smartphone, therefore it can be expected that skill-based habit may also increase the perception of other value dimension related to technology usage (Yen and Wu, 2016). To the best of author knowledge, the study that focuses on skill-based habit is hardly found, leading to the need in extending its theory by investigating its effect with other factors such as perceived consumption value to build customer loyalty.

1.4   Research Questions

Based on the discussion of problem statements, this study accordingly seeks to explore and to provide answers to the following research questions:

1. Does perceived consumption value (functional value, emotional value, social value, epistemic value, and interaction support value), perceived cost value, skill-based habit, facilitating condition have direct influence on behavioural loyalty among Gen Y smartphone users in Malaysia?

2. Does perceived consumption value (functional value, emotional value, social value, epistemic value, and interaction support value) mediate the relationship between skill-based habit and behavioural loyalty among Gen Y smartphone users in Malaysia?

3. Does perceived consumption value (functional value, emotional value, social value, epistemic value, and interaction support value) mediate the relationship between facilitating condition and behavioural loyalty among Gen Y smartphone users in Malaysia?

4. Does perceived cost value mediate the relationship between perceived consumption value (functional value, emotional value, social value, epistemic value, and interaction support value) and behavioural loyalty among Gen Y smartphone users in Malaysia?

5. Does personal innovativeness moderate the relationship between behavioural loyalty and its predictors (perceived consumption value (functional value, emotional value, social value, epistemic value, and interaction support value) and perceived cost value) among Gen Y smartphone users in Malaysia?

1.5   Research Objectives

The objectives of this study are:

1. To examine the direct influence of perceived consumption value (functional value, emotional value, social value, epistemic value, and interaction support value), cost value, skill-based habit, facilitating condition on behavioural loyalty among Gen Y smartphone users in Malaysia.

2. To investigate the mediating role of perceived consumption value (functional value, emotional value, social value, epistemic value, and interaction support value) in the relationship between skill-based habit and behavioural loyalty among Gen Y smartphone users in Malaysia.

3. To investigate the mediating role of perceived consumption value (functional value, emotional value, social value, epistemic value, and interaction support value) in the relationship between facilitating condition and behavioural loyalty among Gen Y smartphone users in Malaysia.

4. To investigate the mediating role of perceived cost value in the relationship between perceived consumption value (functional value, emotional value, social value, epistemic value, and interaction support value) and behavioural loyalty among Gen Y smartphone users in Malaysia.

5. To investigate the moderating role of personal innovativeness in the relationship between behavioural loyalty and its predictors (perceived consumption value (functional value, emotional value, social value, epistemic value, and interaction support value) and cost value) among Gen Y smartphone users in Malaysia.

1.6 Scope of Study

This study focuses on customer perceived value of product-based technology. Smartphone is chosen as the example of technology product for this study because it carries many similarities with most of other technology-based product type. In addition, smartphone is seen as lifestyle and common need, it is considered as important product to engage with other people (Roberts et al., 2015). Therefore, purchasing smartphone will involve a lot of factors related to value that can influence customer loyalty.

This study will be conducted in Malaysia as it is one of Asia countries which have high number of smartphone users. According to Worldbank (2015), Malaysia has its highest mobile phone market penetration by 140% in 2014. There are more than 47% of users having multiple handsets and 80% of them are smartphone users (Nielsen, 2014). In addition, the reduction of the 10% sales tax on all mobile phones in Malaysia since 2010 has caused the increasing the number of new brands of smartphone entering the Malaysia market (Pr-Inside, 2015). Given that many choices of smartphone in Malaysia, the concern for customer perceived value becomes significant and the study that examine its effect on customer loyalty may be more appropriate to be conducted.

In addition, this study however only focuses on Malaysian young smartphone users or known as "Generation Y" who were born between 1981 – 1997 or who are are in the age between 21 – 37 years old in 2018 (Pew Research Center, 2016). This is because not only their population is the biggest compared to other generations, but they also are known as unpredictable and less loyal compared to other generations (Chuah et al., 2017). Thus, the focus of customer loyalty will be more significance for this generation.

Finally, besides perceived value construct, the predictor of customer loyalty adopted in this study also includes customer habit. Habit in this study is focused on specific automatic behavior related to the skill in using smartphone rather than the general automatic behavior in using the smartphone or known as skill-based habit. Since there are two different approaches of habit in the literature, this study

conceptualizes habit as multidimensional construct which is in contrast with most of mobile technology studies which conceptualized habit as unidimensional construct.

1.7 Significance of Study

This study provides significant theoretical and practical contributions in the area of customer loyalty among Malaysian smartphone users in the context of Gen Y customers.

1.7.1 Theoretical Contribution

One of the contributions of this study is to extend the Consumption Value Model of Sheth et al. (1991) by adding one new dimension of interaction support value in the context of smartphone usage. Furthermore, as has been suggested by Means-End Theory (Zeithaml, 1988) that product utilities significantly influence the perception of cost value, therefore the correlation between perceived consumption value and perceived cost value, as well as the mediating effect of perceived cost value in the relationship between perceived consumption value and behavioral loyalty is proposed as another contribution of this study in extending the Consumption Value Theory.

Since the behavioral usage of technology such as smartphone is determined by facilitating condition (Venkatesh et al., 2016; 2012), therefore the effect of facilitating condition on customer perceived value as well as the mediating role of perceived consumption value in the relationship between facilitating condition and behavioral loyalty is also proposed as another contribution of this study in extending the Consumption Value Theory in mobile technology usage context.

In addition, given a persistent and general nature of personal innovativeness in trying out and accepting innovations across multiple technologies, the moderating effect of personal innovativeness in the relationship between behavioural loyalty and

its predictors such as perceived consumption value and perceived cost value is also proposed as another contribution in extending the Consumption Value Theory in this study.

On the other hand, in order to have better prediction of customer behavioral loyalty, the habitual construct such as customer skill-based habit is also included in the research model of this study. The adoption of habitual construct particularly in mobile technology studies can be considered to be crucial as the use of technology is often related with the learning process that may become a habituated behavior over time (Mouakket, 2015). However, the study that investigates the influence of skill-based habit on another construct is limited (Hsiao, 2016; Chiu et al., 2012).

Given that previous habit studies have focused on usage habit and conceptualized it as unidimensional construct (Huang, 2018; Yang et al., 2016; Nikou and Bouwman, 2014: Dernbecher et al., 2013; Chiu et al., 2012; Kim, 2012), this study therefore fills the gaps in previous habit literature by focusing on specific habit related to the skill in using technology or known as skill-based habit proposed by Murray and Haubl (2007). Accordingly, in extending the Cognitive Lock-in (Skill-Based Habit) Theory, this study gives contribution in two areas. Firstly, skill-based habit in this study is conceptualized as multidimensional construct comprises three habit components such as awareness, controllability, and mental efficiency in mobile technology context. Secondly, since skill-based habit has been postulated to influence customer loyalty via perceived ease of use, this study therefore attempts to bridge the gap by investigating the correlation between skill-based habit on another construct such as perceived consumption value and behavioral loyalty.

Lastly, this study contributes to the IT and IS literature by proposing the research framework through integration of three theories namely Consumption Value Theory (Sheth et al, 1991), Means-End Theory (Zeithaml, 1988), and Cognitive Lock-in (Skill-Based Habit) theory (Murray and Haubl, 2007). In addition, this study expands the body of literature in IT and IS context by addressing the need for different strategy for different customer groups in building customer loyalty. Hence, the finding of this study gives better understanding of the purchasing behavior for IT and IS

researchers who focus on Gen Y customers, and particularly in smartphone context in Malaysia.

1.7.2   Practical Contribution

This study is conducted to provide a fundamental basis in building customer loyalty among Gen Y customers in smartphone industry. Smartphone industry is one of the most fast-growing industries with intense competition, thus the concern about building customer loyalty is crucial, particularly in Asia countries such as Malaysia whereby by more than 50% of smartphone user population is from Gen Y cohort which are described as having high purchasing power and less loyal customer. By providing a better and more comprehensive model, the result of this study is expected to give better understanding in building customer loyalty in the context of Gen Y customers. From the perceived value perspective, the marketers therefore can make a better adjustment in delivering superior value to their customer, while for the customer skill-based habit perspective, the company therefore can focus on developing better operating system and user interface design in order to have lock-in effect to their customer from competing brand.

In addition, for government and policy makers, as the present study corporates the location-related factors (facilitating condition), the result of this study therefore could potentially be beneficial to the Malaysia government who is still struggling to reduce the digital gaps in the country (MCMC, 2017). In addition, considering the existing of local brands in Malaysia smartphone market, the policy makers therefore could also use the information provided in this study by introducing the policies that encourage the local manufacturer to have higher standard in delivering value to their customers thus boost their position in local and global smartphone value chain.

1.8   Conceptual and Operational Definition

In conducting and explaining the topic of research, this study uses several terms that will be explained as follows:

Customer Perceived Consumption Value (PCV): is defined as the value (utility) that the customer received from the consumption experience of the product or service and it directly influences purchase behavior (Sheth et al., 1991). In this study, PCV is conceptualized as second-order multidimensional construct which is measured by five dimensions related to the use of smartphone including functional value (FV), emotional value (EV), social value (SV), epistemic value (EpV), and interaction support value (ISV) (Chuah et al., 2017).

Functional Value (FV): is defined as the utility derived from the functionality of the product or service (Sweeney and Soutar, 2001). In this study, FV is measured by the items related to smartphone performance, workmanship, and quality (Sweeney and Soutar, 2001).

Emotional Value (EV): is defined as the utility derived related to the feeling arouse when using the product or service such as the feeling of enjoyment and fun (Sweeney and Soutar, 2001). In this study, EV is measured with the items related to the feeling of enjoyment, relax, and pleasure when using the smartphone.

Social Value (SV): social value in this study is defined as the utility derived from the product ability to enhance the social self-concept in the society (Sweeney and Soutar, 2001). In this study, SV is measured with the items related to the image and impression obtained from using the smartphone.

Epistemic Value (EpV): is defined as the utility derived related to the product ability to arouse the curiosity or offer the novelty to the customer (Pura, 2008). In this study, EpV is measured with the items related to customer curiosity and the feeling of experimenting new things from using the smartphone.

Interaction Support Value (ISV): is defined as the utility derived from product ability to support the interaction among smartphone users (Cho, 2015). In this study, ISV is measured with the items related to easiness to interact and to connect with other people in using the smartphone.

Cost Value (CV): is defined as the utility derived related to the short term and long-term cost spent by the customer in using the product or service (Sweeney and Soutar, 2001). In this study, CV is measured with items related to price, time and energy consumed in purchasing and using the smartphone (Sweeney and Soutar, 2001).

Customer Behavioral Loyalty (BL): is defined as customer commitment to maintain a valued and important relationship with the organization (Hur et al., 2015). Two aspects used in this study to measure BL which are repeat purchase intention and the willingness to spread positive word-of-mouth to other potential customers.

Customer Skill-based Habit (SBH): is defined as automatic response in obtaining certain goals related to the skill that has been developed during learning process of using technology product (Murray and Haubl, 2007). In this study, SBH is measured based on the automaticity level of smartphone users in operating their smartphone including the awareness aspect such as the unconsciousness in operating the smartphone, the controllability aspect such as the difficulty in controlling the tendency in operating smartphone, and the perceived of mental efficiency aspect such as the mindless manner in operating the smartphone (Polites and Karahanna, 2012).

Facilitating Condition (FC): is defined as the availability of the resources necessary to support the use of product or service (Venkatesh et al., 2012). In this study FC is measured with the items related to the availability of the resources necessary to support the use of smartphone (e.g. Internet access, help from people, accessories and spare part, and services) (Venkatesh et al., 2012).

Personal Innovativeness in Domain of Information Technology (PIIT): is defined as customer's willingness to try out new information system or technology (Lu et al., 2014). In this study, PIIT is measured with items related to the tendency of the customers to seek for information regarding the new smartphone (brand) with respect to new innovation.

Generation Y: is defined as a group of people who are born between 1981 – 1997 who are in the age between 21 – 37 years old in year 2018 (Pew Research Center, 2016).

Smartphone: in this study, smartphone is referred as cellular phone that has capability to perform many of functions of a computer, to access the Internet, which is built by touchscreens interface and an operating system that capable of downloading and running Apps (Oxford Dictionaries).

Mobile Operating System (OS): is a software platform that is designed on mobile devices such as smartphone to allow other programs or software called applications to run on mobile devices (Webopedia, 2018).

1.9   Organization of Study

This study is organized into five chapters. The first chapter contains an introduction of the study which includes the background of the study and describes the motivation behind this study. In this chapter, the problem statements of study are explained, and the objectives of the study are determined. A short explanation about the scope of study and the significance of study, as well as the terms used in this study are also provided in this chapter.

The second chapter of this study outlines the literature review of the main concepts of the study. It starts with a discussion of the underpinning theories that govern the whole study, followed by the theoretical concepts of the perceived consumption value, perceived cost value, customer skill-based habit, facilitating

condition, personal innovativeness, and customer behavioural loyalty. The relationship between variables are then presented. Finally, the theoretical framework and hypotheses of the study are established based on the relationship of various constructs and gaps identified in the literature review.

The third chapter of this study focuses on the method that is used in conducting the research. In this chapter, the research design, the target population and sample, the methodology used to collect the data, as well as the tools used in analysing the data are explained elaborately.

The fourth chapter in this study illustrates the findings of the study. It begins with the explanation on the procedure undertaken in pre-testing the questionnaire. After that, a basic analysis of the demographic variables of the respondents is performed. Then, the validity and reliability of all constructs used in the study is tested. Finally, the conceptual model is tested to signify the significance of the hypothesised relationships in the proposed research model.

The final chapter in this study which is chapter five recapitulates the entire research. It comprehensively discusses if the results replicate and are consistent with that of the previous studies. Furthermore, justifications and implications for research and practise are discussed deliberately. Following this, the constraints of the study and suggestions for future research are also highlighted. Finally, the chapter summarises the contributions of the study to the existing knowledge in the domain of Consumption Value Theory and skill-based habit theory.

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1.   **Aulia, S. A.,** Sukati, I., & Sulaiman, Z. (2016). A Review: Customer Perceived Value and its Dimension. *Asian Journal of Social Sciences and Management Studies, 3*(2), 150-162. http://dx.doi.org/10.20448/journal.500/2016.3.2/500.2.150.162**. (Google-based Impact Factor (2017): 0.93)**

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1.   **Aulia, S. A.,** & Sulaiman, Z., (2018). Personal Innovativeness and Skill-Based Habit Perspective in Smartphone Industry. In: Asean Youth Conference (AYC) 2018. Islamic University Malaysia (IIUM). Gombak, Kuala Lumpur, Malaysia. **(Processing for SCOPUS Index)**.

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1.   **Aulia, S. A.,** Sulaiman, Z., & Shukor, M. S. (2017). The Mediating Role of Incumbent System Habit in the Relationship between Customers Perceived Value and Repurchase Intention in Smartphone Industry in Malaysia. In: *Social Sciences Postgraduate International Seminar (SSPIS) 2017*. School of Social Sciences, USM, Pulau Pinang, Malaysia, pp. 440-449. ISBN 9789671544013.

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1.   **Aulia, S. A.,** & Sulaiman, Z., (2018).

2.   **Aulia, S. A.,** & Sulaiman, Z., (2018). Behavioral Loyaly among Millenial Smartphone Users in Malaysia: The Mediating Role of Perceived Value. In:

Research Canvas Competition 2018. Universiti Teknologi Malaysia. **(Top 10 Research).**

3.   **Aulia, S. A.,** & Sulaiman, Z., (2019). Behavioral Loyaly among Millenial Smartphone Users in Malaysia: The Mediating Role of Perceived Value. In: Research Canvas Competition 2018. Universiti Teknologi Malaysia. **(Top 10 Research).**

4.   **First Runner Up** at Three Minutes Thesis (3MT) Competition at Universiti Teknologi Malaysia (2019).

5.   **Best Presenter** at ASEAN Youth Conference at International Islamic University Malaysia (2018).