BRAND EQUITY AND CURRENT USE AS THE NEW HORIZON FOR REPURCHASE INTENTION OF SMARTPHONE

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ABSTRACT

Malaysian Government is targeting a 75% household broadband penetration by the year 2015. As every one owns on average one handphone, the adoption of broadband through handphone or more popularly known as smartphone would be the natural path to take. Past literatures had suggested that branding do contribute towards the acceptance of Information Technology, however its effect on repurchase intention had been scarce. As such, this study attempts to examine these relationships. The results of the study indicated that brand equity dimensions, namely brand awareness, brand association, perceived quality and brand loyalty have positive influence on the use of smartphone and it's future repurchase intention. Current use was also found to have positive relationship with the intention to repurchase. The study also found that current use has partially mediated the relationship between brand equity dimensions and future's purchase intention, which leads to prove the importance of current use in technology adoption. Therefore, it is imperative that for the smartphone manufacturing companies and the Government to implement marketing programs by acknowledging that brands too play an important role in the adoption of latest Information Technology products. Relevant parties should consider brand equity as the next domain empowering the usage and repeat use of high technology products and services.

Keywords: Brand Equity, Repurchase Intention, Brand Equity Model (BEM), Smartphone Current use.

1. INTRODUCTION

The proposed framework will focus on repurchase intention in the context of an IT product, an item (smart phone) that is becoming an essential communication tool for business executives. Hand phone and Internet are the two technologies that have major impact on politics, economy and social in the 21st century (O'Leary & O'Leary, 2005). The converging of hand phone and

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internet (Baily et al, 2001) had given birth to smartphone. Smartphone is an Information Technology tool to perform mobile internet (Park & Chen, 2007), capable of accessing internet at broadband speed ranging from 144 kbps.

According to FCC (2009), data transfer speed of more than 200kbps can be classified as broadband speed. Malaysian Government is targeting 75% internet broadband penetration by the year 2015 from the existing 18% in 2007 (MICC, 2009). This is important as the broadband penetration rate will have positive correlation with the country's Gross Domestic Products. One of the proposed channels in broadband penetration is through the smartphones. The smartphones can be attributed to their tangible components but also the intangible as well. This intangible part is often referred as brand equity. This study had also been motivated by the call made by Chiu et al., (2009) for further research in identifying various dimensions of hedonic (intrinsic) and utilitarian (extrinsic) values and to examine their relative importance in driving customers' repurchase intention. Past literatures (Chen & Chang, 2008; Cobb-Walgren, Ruble & Donthu, 1995), demonstrated that brand equity affects purchase intention. However, their impact on repurchase intention had seldom been examined. Current use to an extent had shown to influence repurchase intention (Agarwal & Prasad, 1997). In addition, the effect of bringing brand equity dimensions into the account is not widely known. Although links between brand equity dimensions and current use with repurchase intentions have often been assumed, little empirical evidence is available to support this perspective. Therefore, this study is the attempt to examine their influences on repurchase intention.

The importance of brand equity had been affected ever since the inception of private label of which branding is of less importance (Ailawadi, Lehmann & Neslin, 2003). This was found to be relevant for low involvement products such as private labels of hypermarkets. Mackay (2001) had worked on predicting the customer's choice as a component of brand equity. Eagle and Kitchen (2000) investigated the advertising effect, that it was a source of branding which influence sales. Country of origin of the product also can make difference when one's compared their respective brand equity (Norjaya, Mohd & Osman, 2007). Yong et al. (2006) found out that the longer the duration of local brands, the better is their brand share in a transitional economy. On the measurement, the concept of brand equity had been tested using many methods including personal interview (Yong et al. 2006), secondary data (Simon & Sullivan, 1993) and questionnaires (Norjaya, Mohd & Osman, 2007). Malhotra, Peterson and Kleiser (1999) had recommended that the refinement of brand equity was still needed and suggested to investigate brand equity from the consumer's point of view. Keller and Lehmann (2006) too suggested investigating brand equity from the customer level, which supports the notion that customer is the king.

2. LITERATURE REVIEW

One of the earliest and popular definitions of brand equity came from Aaker (1991, p.15) as a "set of brand assets and liabilities linked to a brand, its name and symbol that add to or subtract from the value provided by a product or service to a firm and/or to that firm's customers". Another great influence in studying brand equity, Keller (1993) defined brand equity as brand knowledge consisting of brand awareness and brand image. Although Aaker (1991) and Keller

(1993) conceptualized brand equity differently, both defined brand equity from a customer perspective and emphasize that customer based brand equity provides value to the firm and to the customer. In investigating the similarities between these two main brand equity conceptualizations, both approaches also include similar dimensions, which could represent a common measure of customer based brand equity.

2.1. The Influence of Brand Equity

The authors agreed with Aaker (1991) where he specifically states that the brand equity benefits the consumer, i.e. either generally add or subtract value for customers. The brand equity assets can help them interpret, process, and store huge quantities of information about products and brands. They also can affect customers' confidence in the purchase decision.

According to Cobb-Walgren, Ruble and Donthu (1995), the individuals' perception is influenced by the psychological and physical features of the product (Figure 1). The perception, in turn affects the brand equity and ultimately brand equity influences purchase intention. The perception of psychological features here has a similar meaning with the dimensions of brand equity consisted of perceived quality, brand loyalty, brand awareness and band association. Cobb-Walgren, Ruble and Donthu (1995) found that the higher brand equity the generated higher purchase intention in the choice of hotels and detergents, representing services and product category respectively. Specifically, they found out that perceived quality, brand association and brand awareness significantly correlated with purchase intention. However, they did not prove that brand name having greater feature importance in services compared to product. Chen and Chang (2008) took Cobb-Walgren, Ruble and Donthu (1995) for further study and proved that brand equity have positive relationship with purchase intention. However, this relationship had been affected in the presence of low switching cost as the moderating variable. Esch et al. (2006) found that brand knowledge alone is not sufficient to built strong brand. In their study, brand image and brand awareness affected current purchase but not future purchase. Brand knowledge only affects future purchases through mediating variables such as brand relationships.

From the study by Cobb-Walgren, Ruble and Donthu (1995), it is clear that brand equity affects purchase intention, however, with the presence of the third variable either moderating or intervening, had adversely affect this relationship as seen in Chen and Chang (2008) and Esch et al. (2006). To date, there is little empirical evidence of how brand equity effecting consumer current use and repurchase intention.

**Figure 1:** Antecedents and Consequences of Brand Equity
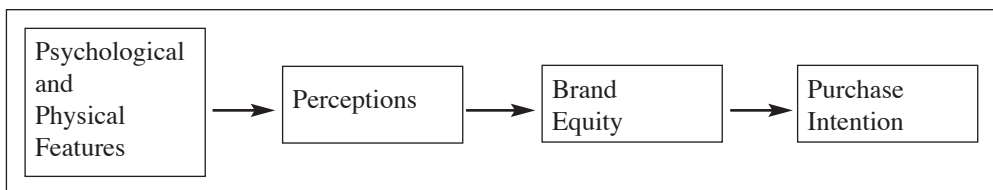
Source: Cobb-Walgren, Ruble and Donthu (1995)

2.2. Research Model

The proposed research framework (see Figure 2) consists of independent variable, mediating variable and dependent variable. Brand equity represents the independent variable while the Current Use representing the mediating variable and repurchase intention is the dependent variable for the study. The research model was derived from the theoretical framework of Theory of Reasoned Action (Fishbein and Ajzen, 1975) and Brand Equity Model (Aaker, 1991). The relationships among the variables are depicted in the figure below.

Figure 2: The Proposed Research Model
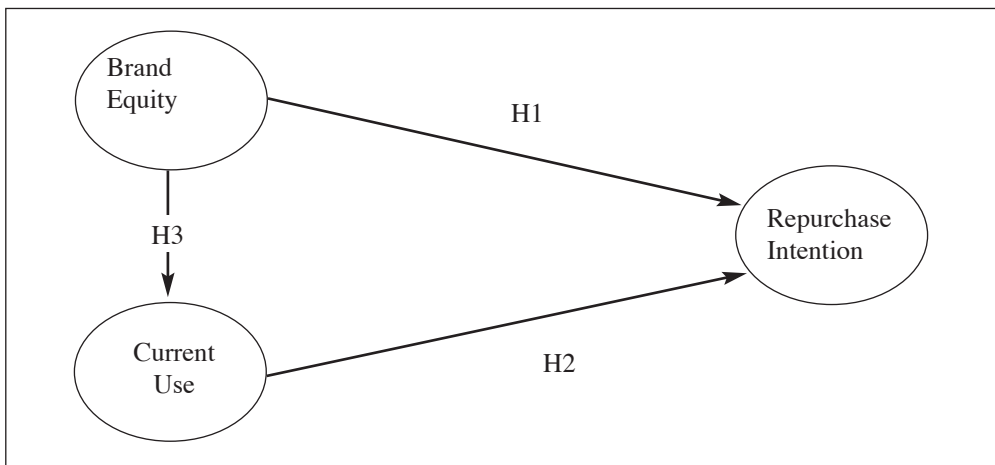
2.3. Dimension of Brand Equity

As mentioned above, different authors cited different definition of brand equity, resulting diverse dimensions of brand equity. However, the similarity of these dimensions are there and generically formed the very basis of the construct. The following section discuss about the relevant dimensions (brand awareness, brand association, perceived quality, brand loyalty) of brand equity of the proposed framework.

2.3.1. Brand Awareness

One of the major goals of branding management is to develop and maintain brand awareness because of the impact of awareness on consumer decision making and overall effect on firm values. Brand awareness is defined as "the ability for a buyer to recognize or recall that a brand is a member of a certain product category" (Aaker, 1991, p. 61). Generating and maintaining brand awareness are important as only those brands of which customers are aware enter into the consideration set of brands for possible purchase, and brand awareness influences the selection of products from the consideration set (Hoyer & Brown, 1990). Hence, only brands

which customers recognize can be identified, categorized and ultimately purchased. Srinivasan, Park and Chang (2005) suggested new way of measuring brand equity at customer level by concluding that brand awareness is important construct in determining brand equity. This findings is an extension to the previous work of Park and Srinivisan (1994) where they added another variable, brand awareness over the existing variables, namely non-attribute components and attribute components that affect brand equity. Ataman, Berk and Ulengin (2003) concluded that brand image affects sales, and study by Baldauf, Cravens and Binder (2003) had confirmed that brand awareness too contributed to customer perceived value and firm value. They used measurement items such as "I know how X looks like", "recognize, "aware", "come to mind quickly" and "recall". The reviewed literatures posited that brand awareness contributed to brand equity. It is important that the buyer have some kind of opinion on the brand to show that they know the brand or as a feedback after using the brand (Norjaya, Mohd & Osman, 2007). This study adopted many of the items mentioned above. For the current study, brand awareness is defined as the ability of consumers to recall and recognize the brand.

2.3.2. Brand Association

Consumers' favorable brand beliefs will influence their purchase intentions and choice of the brand. In the context of electronic product such as smartphone, brand associations can be represented by the functional and experiential attributes offered by the specific brand. Consumers associate the brand with, such as dynamism, high technology, innovativeness, sophistication, distinctiveness, excellence and prestige. These items are adopted from the work of Norjaya et al. (2007). The combination of tangible and intangible attributes creates a brand identity, that is "a unique set of brand associations that the brand strategist aspires to create or maintain," which drives brand associations (Aaker, 1996). Therefore, the identity of the specific brand may impact brand associations and ultimately sales. In short, brand association is defined as the strength of functional and experiential attributes perceived by the user.

2.3.3. Perceived Quality

Zeithaml (1988, p.3) defines perceived quality as "the consumer's (subjective) judgment about a product's overall excellence or superiority". High perceived quality means that, through the long term experience related to the brand, consumers recognize the differentiation and superiority of the brand. Zeithaml (1998) identifies perceived quality as a component of brand value. Baldauf, Caren and Binder (2003) had proven that perceived quality contributed to customer perceived value and firm value. Meanwhile Chen (2007) posited that perceived quality was significantly contributed by using authorised distributors. Thus, selecting the authorised channel for product distribution will enhance perceived quality and brand equity. Perceived quality is considered as one of the main facets across customer based brand equity frameworks (Farquhar, 1989; Keller, 1993; Aaker, 1996) that perceived quality provides value to customers by providing them with a reason to buy and by differentiating the brand from the competing brands. It is predicted that customers' perception of quality will be associated with their brand loyalty. Customer who perceived the brand as offering superior quality will likely to purchase the brand again. The set of perceived quality variables defined for the framework

in this paper is based on contribution by previous researchers such as Dodds, Monroe and Grewal (1991) and Yoo and Donthu (2002). The dimensions of quality includes: reliable, high workmanship, good quality, dependable, durable and functional. Thus, quality is defined as the superiority of the selected brand over others.

2.3.4. Brand Loyalty

Smith and Wright (2004) investigated the customer loyalty and found out that product value attributes directly impact the levels of loyalty. In their analysis, they concluded that brand image, firm viability, product quality and post sales service quality significantly affect repeat sales. Punniyamoorthy and Mohan (2007) investigated the antecedents of brand loyalty and found out that involvement, functional value, price worthiness, emotional value, social value, brand trust, satisfaction, commitment and repeat purchase are having positive relationship with brand loyalty. In summary, loyalty had been investigated to been formed through the following antecedents such as brand trust, commitment, satisfaction, perceived value, image, association, quality and others. Likewise, the consequences of brand loyalty are related to their relationship with repeat purchase, purchase intention, word of mouth, preference, price premium, brand equity, variety seeking, performance, resistance to competitor and brand switching.

Loyalty can be hard to define as it can be formed from attitudinal or behavioral dimensions. One of the attitudinal loyalties is attitude towards brand. Attitude toward brand is an attitudinal measure for loyalty as attitude toward the brand is a relatively enduring, unidimensional summary evaluation of the brand that presumably energizes behaviour. This study encompasses the dimensions of appealing, good, pleasant, favourable and likeable as found in Spears and Singh (2004) as the measurement for the construct of attitude toward brand. Thus, brand loyalty is defined as the attitude toward brand.

2.4. Current Use

Specifically, the models such as Technology Acceptance Model (TAM) Davis et al. (1989); Davis (1989) and its underlying theoretical base, Theory of Reasoned Action (TRA) (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975), postulate that beliefs or perceptions about the characteristics of the target system are antecedent to behavioural intent to adopt and use the system. Theory of Reasoned Action is a general theory developed in social psychology that attempts to explain and predict individual behaviours (Ajzen & Fishbein, 1980), whereas Technology Acceptance Model has been proposed specifically for the footprint of Information Technology (Davis, 1989; Davis et al. 1989).

Agarwal and Prasad (1997) had defined acceptance or rather current use as the system success is equivalent to individual use of the innovation. Similarly, Delone and McLean (2003) defined current use as a measure of successful new technology implementation. The measurement items such as: use a lot, use whenever possible, use frequently, use whenever appropriate and use other features had been adopted from these studies. Thus, for this study, current use is defined as the use of smartphone.

2.5. *Repurchase Intention*

Intentions are different from attitudes where attitudes are summary evaluations while intentions represent the person's motivation in the sense of his or her conscious plan to exert effort to carry out a behavior (Eagly & Chaiken 1993). In Fishbein and Ajzen's (1975) formulation, attitudes influence behaviour through behavioural intentions. Past studies indicate that the link between attitude toward the object and behaviour is not always clear. In some cases, attitudes have a direct effect on behaviours (Bagozzi & Warshaw 1992) but no effect in Bagozzi (1992). An intention to buy a brand is based on a consumer's attitude towards buying the brand as well as the influence of social norms about what other people expect.

At times, intention is also difficult to measure. For instance, Bagozzi, Baumgartner and Yi (1989) commented that when an individual is unclear about his or her intention in regards to some action, there is strong tendency for him to react based on their past actions. Here, the individual is likely to report his or her habit rather than intention when responding to the intention (Warsaw & Davis, 1985). Despite issues, purchase intention is an important construct in consumer behavior (Kotler & Armstrong, 2003). Having said so, the study of repurchase intention was said to be important due to their long term implications (Ritti & Silver, 1986). Repurchase intention is similar with purchase intention except with the element of experience. Therefore, repurchase intention is defined as the likelihood the user will purchase again of the smartphone in the future.

In conclusion, the past literatures had linked brand equity to have relationship with purchase behavior. Based on this motivation, the idea of examining further the relationship between them is anticipated and with reference to the previous cited theoretical and literatures, the following three hypotheses were proposed.

Hypothesis 1:   There is a significant and positive relationship between brand equity dimensions and repurchase intention.

Hypothesis 2:   There is a significant and positive relationship between current use and repurchase intention.

Hypothesis 3:   There is a significant mediation by current use on the relationship between brand equity dimensions and repurchase intention.

3. METHODOLOGY

3.1. *Data Collection and Analysis*

The selection of smartphone as the focal of the study is mainly due to the fact that, it is becoming an essential IT gadget to the working executives. The smartphone offers flexibility to the executive to be mobile and ability of wireless data and voice communication with their clients at anytime, anywhere they are.

The participants in this study are all working executives, the real smartphone users in Malaysia. Due to the budget constraint, cluster sampling was chosen as it provides the most cost efficient in carrying out probability sampling among the techniques available (Malhotra, 2010). As these executive users of smartphone can be found at the higher learning institutions, the population was clustered into thirteen states and three Federal Territories. All the public and private universities that offered campus based Master Degree program from the clusters are listed and this list formed the sampling frame for the research.

Once the name of institution was chosen through a simple random sampling, the permission is requested from the relevant authority to obtain the approval to carry out the survey. The data were collected using questionnaires which were administered collectively. A total of 147 successful questionnaires were gathered. The participation by a small sample in this study can be attributed to many reasons. There are still many people who have not used smartphone. The use of smartphone may have been discouraged by its price which is relatively more expensive than the ordinary phones and coupled with the expensive data charges by the telecommunications companies. Thus, smartphone is more likely to be used by the affluent groups. In short, the adoption of smartphone is still relatively new in Malaysia.

The collected data were analyzed using statistical program in order to carry out the hypothesis testing. Among the relevant tests conducted to answer the hypothesis are Pearson Correlation test and Mediation test. Prior to these tests, the data were checked for normality and reliability and some descriptive analysis was performed on the demographics of the respondents and the market share of the smartphone brands.

4. FINDINGS

4.1. Research Findings

A frequency table is drawn from the data to find out the top three smartphones brand in Malaysia. Nokia commands the highest share at 37% followed by Sony Ericsson 17% and iPhone at 16% (see Table 4.1).

Table 4.1: Smartphone Brands in the Study

Brands	Frequency (n)	Percentage (%)
Nokia	55	37.4
Sony Ericsson	25	17.0
BlackBerry	16	10.9
HTC	9	6.1
iPhone	23	15.6
Motorola	7	4.8
Others	12	8.2
N	147	100.0

Source: Survey

From the total samples, 52% of them are males and 48% females. The study consists mainly from the age group of 20-29 (37%) and 30-39 (42%). These two groups made up to 79% of the survey. While almost half of the respondents are Chinese (48%), there are Malays (33%) and Indians (16%) who had participated. From the total that responded, almost 45% of the respondents earned more than RM5,000 a month and another 42.2 % earned between RM5,000-RM10,000. The full details of the demographic profiles is shown in Table 4.2 below.

Table 4.2: Demographic Profiles of the Respondents

Characteristics	Frequency (n)	Percentage (%)
Gender		
Male	76	51.7
Female	71	48.3
N	147	100.0
Age		
Under 20	2	1.4
20-29	54	36.7
30-39	62	42.2
40-49	20	13.6
50 & Above	9	6.1
N	147	100.0
Race		
Malay	48	32.7
Chinese	71	48.3
Indian	23	15.6
Others	5	3.4
N	147	100.0
Monthly Income		
Less than RM5,000	65	44.2
RM5,001-RM10,000	62	42.2
RM10,001-RM15,000	10	6.8
More than RM15,000	9	6.1
Decline	1	0.7
N	147	100.0

Source: Survey

Correlation analysis using Pearson Correlation (r) was conducted to find out the relationship between brand equity dimensions, current use and repurchase intention. The results confirmed that all hypothesis 1 (H1a to H1d) are supported. A correlation that is less than 0.3 is negligible. For this case, the correlations ranging from .410 to .519 with p value less than 0.01. Similarly, correlation analysis was also conducted to find out the relationship between current use and repurchase intention. The result confirmed that hypothesis 2 is also supported ($r = .459$, $p = 0.000$). Table 4.3 summarized the linear relationships between independents variables and the dependent variable.

Table 4.3: Pearson Product-Moment Correlations between dimensions of Brand Equity, Current Use and Repurchase Intention

Variables	1	2	3	4	5
Repurchase Intention					
Brand Awareness	.519**				
Brand Association	.544**	.662**			
Perceived Quality	.456**	.628**	.668**		
Brand Loyalty	.410**	.566**	.594**	.730**	
Current Use	.459**	.375**	.527**	.353**	.372**

Notes: **. Correlation is significant at the 0.01 level (1-tailed)
Source: Survey

Hypothesis 3 involves a mediating test. In testing mediation, technique from Baron and Kenny (1986) was used. According to them, to test mediation there are three basic requirements. They are:

1) Independent variable must have significant relationship with mediating variable;
2) Independent variable must have significant relationship with dependent variable;
3) Independent variable must have significant relationship with dependent variable in the presence of the mediating variable.

They further clarified that, in order to test mediation the beta coefficient of equation 3 above must be less than in equation 2 above. From the data analysis, brand awareness, brand association, perceived quality and brand loyalty were all found to have significantly relationship with repurchase intention when regressed together with Current Use as the mediating variable. These are proven by the decrease of the beta coefficient in Model 2 compared to Model 1 as summarized in Table 4.4 below. Thus, hypothesis 3 is also fully supported that current use partially mediates the relationship between brand equity and repurchase intention.

Table 4.4: Relationship between Brand Equity dimensions and Repurchase Intention mediated by Current Use

Independent Variable (IV)	Mediating Variable (MV)	Model 1 (IV and DV) Std. Beta	Model 2 (IV and DV with MV) Std. Beta
Brand Awareness	Current Use	0.519*	0.404*
Brand Association	Current Use	0.544*	0.419*
Perceived Quality	Current Use	0.456*	0.336*
Brand Loyalty	Current Use	0.410*	0.278*

Notes: *$p < 0.05$
Source: Survey

4.2. Summary of Findings

All hypotheses as summarized in the table below, hypotheses 1 to 3 was found to be fully supported. The results showed that Nokia still commands the largest share with 37% of the smartphone adoption in Malaysia. The study also confirmed the theoretical and empirical research on the relationships of brand equity dimensions on adopting behaviour of smartphone. All the brand equity dimensions, namely, brand awareness, brand association, perceived quality and brand loyalty had been found to have positive correlations with the repurchase intention of smartphone. The result shows that brand awareness has the highest relationship with repurchase intention with r = 0.519. This study concurs with some previous study in which brand awareness had also been found to have significant relationship with repurchase intention in Kim et al. (2008); Tolba and Hassan (2010).

Current use was also found to have significant relationship with repurchase intention with r = 0.459. This finding is consistent with the other study (Weisberg et al., 2011). The user's current use had been shown to have significant relationship with repurchase intention. Once the users had the experience to use and reap the benefits of adopting smartphone, their intention to purchase another smartphone in future increases.

The findings too support the notion that current use significantly mediates the relationships between all the brand equity dimensions with repurchase intention (refer to Table 4.5) as the beta values drop after the introduction of this variable.

Table 4.5: Summary of the Results of the Hypotheses Tested

Hypothesis	Sub-Hypotheses	Findings
Hypothesis 1: There is a significant and positive relationship between brand equity dimensions and repurchase intention.	Hypothesis 1a: There is a significant and positive relationship between brand awareness and repurchase intention.	Supported
	Hypothesis 1b: There is a significant and positive relationship between brand association and repurchase intention.	Supported
	Hypothesis 1c: There is a significant and positive relationship between perceived quality and repurchase intention.	Supported
	Hypothesis 1d: There is a significant and positive relationship between brand loyalty and repurchase intention.	Supported
Hypothesis 2: There is a significant and positive relationship between current use and repurchase intention.	None	Supported

Table 4.5: Summary of the Results of the Hypotheses Tested *(cont)*

Hypothesis	Sub-Hypotheses	Findings
	Hypothesis 3a: There is a significant mediation by current use on the relationship between brand awareness and repurchase intention.	Supported
Hypothesis 3: There is a significant mediation by current use on the relationship between brand equity dimensions and repurchase intention.	Hypothesis 3b: There is a significant mediation by current use on the relationship between brand association and repurchase intention.	Supported
	Hypothesis 3c: There is a significant mediation by current use on the relationship between perceived quality and repurchase intention.	Supported
	Hypothesis 3d: There is a significant mediation by current use on the relationship between brand loyalty and repurchase intention.	Supported

Notes: Significant value, $p < 0.05$
Source: Survey

5. CONCLUSION AND RECOMENDATION

To conclude, this paper examined the relationship of brand equity dimensions and current usage on repurchase intention of smartphone. The outcomes from this survey would be of interest to companies promoting smartphone in Malaysia. Focusing on relevant variables on repurchase intention of smartphone, companies will be able to predict a better result from their marketing activities. Notwithstanding that, smartphone companies also need to understand that consumers would only react if the brand that they had chosen continues to reinforce their needs and wants. Thus, convincing the consumers on adopting smartphone using brand power would be one of the primary considerations. This reflects a new paradigm shift where branding represents a new dawn of the marketing horizon and also a new measure of return on marketing investment (ROMI) where the marketers can be proud of.

It seems that smartphone users are satisfied with the performance of their smartphones and they have high intention to continue using this technology in the future. The influence of current use was apparent among the existing customer as they have significant indication to purchase smartphone again. The marketers would be very interested to know the rate of repeat purchase on their brand of smartphone. Thus, brand managers may need to draw a good loyalty program for their existing customers so that they will buy the same brand of smartphone when the need arises. Brand managers should now be prompted that current use not only affect repurchase intention, but it also mediated the dimensions of brand equity which then affecting the repurchase intention.

There are at least 150 million people globally (Goldman, 2010) who are now using their smartphones more and more for multi-tasking such as email and social networking. This number is set to sour due to the introduction of new and affordable smartphones into the markets. The heavier use of email was also fueled by higher usage of social media networks such as Facebook and Twitter on the smartphone. This represents a digital media relevant for advertising that the marketers worth paying attention to. The Internet is now just a tap away on the touch-screen where individuals can check updates multiple times a day. By taking advantage of this digital media and the heavy usage by the smartphone users, advertisers can position their brand message according to their segments as suggested by Ries and Trout (2001). One new way is using the QR (Quick Respond) codes, a type of matrix barcode designed to be read by smartphone. These codes enable potential customers instantly learn about the brand through internet.

Smartphones do affect productivity, communication in the work place and social engagement. To the company, it was easier to control the documents carried in the company supplied laptops and computers. After all, the data in executives' laptops and computers are confidential. Due to the technological advancement, a lot of information can now be retrieved remotely and stored in the smartphone. Issue of data ownership may arise when these smartphones are employees' owned but were utilized for business applications. Companies now ended up spending more resources in managing this situation.

To the executives, extensive use of smartphone can have a negative impact on their daily routines. The pressure to respond to emails is immense, as people are motivated to keep on top of information and are also aware of the consequence for not responding to an email promptly. They are constantly checking their smartphones for emails, Twitter, and Facebook updates and have the urge to know what is happening all of the time. Some may respond to emails during meeting, which will affect their attention in the meeting. Worse still, they did it while driving cars. They had become addicted to the smartphone. Another potential scare is that people do not communicate so much orally and this may lead them to become antisocial.

We can see more and more people have smartphones and they use them in almost everything they do daily. Research had found that smartphones satisfy all social communications needs. These are few of the main effects that smartphones have on us. In conclusion, the benefits of smartphone use far out weighing the negative effects, perhaps it is the matter of control.

Based on the share of the market, Nokia was found to be the most popular smartphone brand, possible due to its long and strong branding and appeal. A further study can be conducted to examine the brand equity of this brand alone. Due to the small size of the sample, a new study using a larger sample can be conducted to verify these findings. Marketers need to know the strengths of their brands, from which they can carefully craft a good marketing plan in order to achieve the maximum impact of their brand. A product that is associated with good quality may adopt a premium pricing policy targeted at selected market segment rather than going for mass market. Marketers may also need to weigh the focus since the brand equity dimensions (brand awareness, brand association, perceived quality and brand loyalty) had been found to be associated with repurchase intention.

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