

Factors Influencing Smartphone Repurchase

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ABSTRACT

This study is an early attempt to deal with the issue of the long-term performance of smartphones in the Thai market by focusing on the construct of the repeat purchase of these products. The adult users of smartphones are interviewed. The results from the multiple regression analysis reveal that brand reputation, aesthetic value or the beauty of the design, and economic value or fair price, are positively correlated with the repurchase of smartphones, whereas learning about new technologies such as smartphones is negatively correlated with smartphone repurchase.

Keywords: Smartphone Repurchase; Smartphone; Customer Value

INTRODUCTION

At the moment, Thailand is in a transition period, changing its mobile network technology from 2G to 3G. The three major network operators, which are Advance Info Service (AIS), Total Access Communication (DTAC) and True Move, have started to set up a 3G network in Bangkok and a selected few other major cities for market trial. Many Thais are quite excited about this movement, encouraging them to purchase smartphones in order to capitalize on the increased speed of response of the Internet connection as they have never experienced before through the GPRS or edge technology, which was previously used with the 2G network. Mobile phones could soon rival personal computers as the world's dominant Internet platform (Wright, 2006). It is expected that the functional values of communication, information searching, social networking, and buying online as the major benefits of Internet for people's daily lives should be enhanced as never before. However, it is premature to assume that the enhancement of these key functional values, in addition to the quality of voice, will lead to the repurchase of smartphones. According to Aaker (1996), in order to provide a value proposition to customers, companies should state the functional, emotional and self-expressive benefits delivered by their brand to the customer. An effective value proposition should lead to a brand-customer relationship and drive purchase decisions. However, this study views that beyond brand values, the customer may be looking for other values in smartphones, including economic value, aesthetic value, educational value, and brand reputation itself as the key drivers for smartphone repurchase. These proposed additional values are intended to fill the gap in the brand value literature.

LITERATURE REVIEW

Functional Value of Voice Quality

As long as smartphones are still used as a telephone, inevitably, one indicator of the quality of the product is that the voice should be heard clearly. Although voice quality is partly affected by network quality, it is greatly influenced by the mechanics of the smartphone as well, and the performance of this attribute of smartphones will likely drive the repurchase of smartphones.

Functional Value of Communication

Smartphones provide consumers with choices in communicating with others, either in two-way communication through the phone or with the ease of one-way communication in e-mailing. A cheaper way of connecting with others through e-mailing by the mobile Internet will enable consumers to contact others more frequently. This additional e-mailing feature of the smartphone will lead to the increasing functional utility of mobile phones and become a value added to the ordinary mobile phone.

Functional Value of Information

Information is the means through which the mind expands and increases its capacity to achieve its goals. The Internet connection of smartphones will enable the consumer to have access an unprecedented amount of information, and in this way knowledgeable consumers can make more informed decisions. For instance, active healthcare consumers can use the Internet to learn about diseases and treatments and share their personal experiences with others. The Internet offered in a mobile fashion will enable consumers to search for the needed information anywhere, anytime. The utility of location, in conjunction with the information search capability of smartphone, will be another value added to the consumers.

Functional Value of Social Networking

Human beings have a natural desire to coalesce around common interests, needs, and experiences. The explosion of the Internet and advances in messaging and telephony is fueling this desire, creating an unparalleled ease and openness of communication among consumers. Consequently, “thematic consumer communities,” in which individuals share ideas and feelings without the limitation of geographic or social barriers, are revolutionizing emerging markets and transforming established ones. Social networking is a way to create social capital. Various forms of social capital, including ties with friends and neighbors, are found to be related to indices of psychological well-being, such as self-esteem and satisfaction with life (Bargh & McKenna, 2004; Helliwell & Putnam, 2004). Smartphones can be used as a medium to establish a social network and thereby create social capital, thus satisfying human needs and creating customer value.

Functional Value of Buying Online

Through an Internet connection, smartphone holders can shop online. According to Kotler (2000) and Skyrme (2001), e-commerce can provide a number of benefits to customers including convenience, information, fewer hassles, low procurement costs, streamlined processes, and private shopping; and transactions can be instant. However, unlike the Internet used with a regular computer, mobile Internet enables retailers to send customized information and to pinpoint user location services in real-time interactions with the customer via a handset. These benefits contribute to the functional utilities of smartphone users.

Emotional Value of Enjoyment

Verkasalo (2008) has reported that the perception of fun has a positive effect on one’s attitude toward technological adoption for almost all of the mobile applications they tested, ranging from e-mailing to using instant messaging. Similar results were reported by Lee et al. (2007) and Ha (2007), respectively, regarding the multimedia messaging system (MMS) context and the gaming context. That is to say, enjoyment or hedonic value is a motivator for smartphone adoption in addition to functional values or utilitarian motives of technological adoption, as mentioned above.

Self-Expressive Value

In a study specific to the mobile setting, Nysveen et al. (2005) found that perceived expressiveness and perceived enjoyment directly influenced the intention to use mobile data services. For various segments of consumers in many countries, several other studies suggest that the mobile phone represents more than just a communications device; it also is used to represent the self through personalized features (Skog, 2002; Kasesniemi and Rautianinen, 2002; Kim, 2002; Harris Interactive, 2007). In other words, a brand can provide a self-expressive benefit by providing a way for a person to communicate his or her self-image.

Economic Value

Price is generally considered as an important factor in consumers’ purchase decisions. If buyers perceive that the benefits offered by the product relative to the perceived sacrifice (i.e., price to be paid) are favorable, then they will be more likely to perceive that the price is fair (Monroe, 2003). The price paid by smartphone users may be

compared with their usage experiences. If the users' perceptions of the performance or quality of the smartphone exceed their expectations, and the smartphone represents good value for their money, then their perception of the listed price should be favorable (Voss et al., 1998). This will lead them to buy the same brand again.

Aesthetic Value

Competition among the smartphone market leaders, whether iPhone, Blackberry, HTC, Nokia, or LG, is very keen. Although each company's products have their own advantages and disadvantages, the price differences between them are negligible. In this kind of a competitive setting it is crucial to use all of one's sources of competitive advantage, including design, as noted by Murtazin (2004). Similarly, Schmitt and Simonson (1997) stated that in an increasingly competitive market, advertisers and manufacturers have begun to argue that styling or changing the appearance and presentation of products could encourage customer demand.

Educational Value

Generally, there is no better way of learning about a new technology than buying that device and trying to make use of it. Before buying a smartphone, consumers may seek information about it, whether through the electronic medium, brochures, friends and family, or from salespersons, in order to learn about the usefulness or functionality of the phones. Once they possess the smartphone, its ease of use will facilitate their learning experience. After they master this new technology, their sense of accomplishment will develop, and this will create value for these technology adopters and is likely to lead to the next purchase of the brand.

Brand Reputation

Previous researchers found that a brand not only provides a unique identity and a distinguishing mark but also links the company to its products or services (Beverland et al., 2007). The importance and value of a brand are widely accepted (Calderón et al., 1997). At the micro or consumer level, Chu and Keh (2006) suggest that brand positively affects behavioral outcomes, including purchase intent.

In short, the factors affecting smartphone repurchase are conceptualized to be various functional values, including voice quality, communication, information, social networking, and buying online; the emotional value of enjoyment; self-expressive, economic, and aesthetic value; and educational value and brand reputation.

Methodology

The first test of this study questionnaire was conducted with 30 MBA students. Then, the pretest was followed by interviewing 30 samples of eligible respondents that were smartphone users of at least 18 years of age and that had at least 4 months experience in using smartphones through the 3G network. The questionnaire was revised based on the feedback from both groups for its suitability and clarity.

The main study was done using face-to-face interviews with four hundred and twenty eligible respondents in the major department stores in Bangkok. The response rate was 80%. Many respondents (43%) had more than one mobile phone. The brand of smartphones that they were using or most often used were the iPhone (41%), Blackberry (32%), Nokia (12%), Samsung (8%), HTC (4%), and others (3%). There was an approximately equal spread among the subscribers of the three major mobile cellular networks; namely, AIS, DTAC and True Move. It happens that many of the smartphones that the interviewees used were their first phones (52%). Most of the respondents paid for the bill by themselves (81%). They primarily used their smartphones for personal matters rather than work or emergencies. To name just a few uses, in addition to voice calls, they used their smartphones for Internet connection, taking pictures and video filming, listening to music, text messaging (SMS, MMS), chatting, playing games, and interacting with the application programs and information services (e.g., news, stock quotes, weather, etc.). On average, they spent 245 minutes with their smartphones each day and paid 802 Baht (approximately \$US 27) per month. They mainly used monthly billing programs (69%), not prepaid ones (31%). Seventy-three percent of them complained about the using of smartphones.

Data Analysis

Every construct was measured according to a single-item scale, except self-expressive value, which as measured with a multi-item scale. For this multi-item scale, exploratory factor analysis was conducted in order to ensure that it was unidimensional. The self-expressive value was measured using four items; namely, self-concept, personality, status, and modernity. These four items were factor analyzed and extracted by using a principal component analysis. It was found that these four items loaded high on the expressive factor. Then, the reliability of this unidimensional scale was assessed. The Cronbach alpha of 0.87 showed that the self-expressive value was highly reliable.

Functional value, emotional value, self-expressive value, economic value, aesthetic value, educational value, and brand reputation were likely to be positively related to smartphone repurchase. In order to find out whether this assumption was true, a multiple regression analysis was conducted. Specifically, the functional value of voice quality, the functional value of communication, the functional value of information, the functional value of social networking, the functional value of buying online, the emotional value of enjoyment, the self-expressive value, economic value, aesthetic value, educational value, and brand reputation were regressed on smartphone repurchase. The results of the multiple regression analysis are shown in Table 1.

Table 1. The results of the multiple regression of factors affecting smartphone repurchase

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.207	.792		1.523	.128
	Price	.145	.070	.109	2.080	.038
	Voice quality	.064	.091	.042	.704	.482
	Communication	-.069	.096	-.046	-.716	.475
	Information	.123	.095	.084	1.302	.194
	Design	.257	.096	.161	2.662	.008
	Social network	-.020	.097	-.013	-.203	.839
	Online Buying	.025	.064	.022	.393	.694
	Enjoyment	.065	.092	.046	.712	.477
	Learning	-.210	.085	-.146	-2.462	.014
	Brand Reputation	.308	.072	.225	4.270	.000
	Expressive	.097	.082	.068	1.176	.240

$R^2 = 0.18$ $\bar{R}^2 = .16$ $F_{11,408} = 8.01$ $p = .000$

RESULTS AND DISCUSSION

According to the standardized beta coefficients, as shown in Table 1, the positive determinants of smartphone repurchase were brand reputation, beauty of design, and fair price respectively, whereas the negative determinant of smartphone repurchase was learning new technology. In other words, brand reputation tended to most influence smartphone repurchase in a positive way, followed by aesthetic value or the beauty of the design, and economic value or fair price. However, educational value or learning about a new technology seemed to have a negative influence on smartphone repurchase. The reason is that the first-time buyer of a certain brand of smartphone may get excited with what they can actually learn and accomplish through interacting with the smartphone. Once they master the technology, the educational value may disappear because of the diminishing utility of return. The same learning will not likely motivate them for the next purchase of the brand unless the new model can offer them a noticeable difference in technology that can be exciting enough to trigger a new wave of learning.

It comes to a surprise that only brand reputation had a positive influence on smartphone repurchase, but none of the brand values, whether it be functional value, emotional value, or self-expressive value, was positively related to smartphone repurchase. This may be because all smartphones were perceived to be similar in delivering

these values to customers. What actually created brand reputation was brand uniqueness. For instance, iPhone has a special feature that enlarges content by simply using one's fingers to convey the direction of the enlargement on the touch screen. Blackberry has its own uniqueness by offering the feature of push mail for getting e-mail in real time, as well as providing the ease of connecting with friends who also use Blackberry through the personal indication number (PIN) by calling or messaging. It is noteworthy that the aesthetic value or the beauty of the design was also a motivator for smartphone repurchase, whereas none of the functional values of smartphones drove repurchase. This phenomenon is in line with the characteristics of Thais in the sense that Thais tend to prefer form over content (Komin, 1990).

CONCLUSION

Brand value, namely, functional value, emotional value, and self-expressive value, does not drive smartphone repurchase, whereas brand reputation can influence smartphone repurchase. In general, customers' values, which include economic value or fair price, aesthetic value or beauty of design, and brand reputation, are the key motivators of a smartphone repurchase. Educational value or learning new technology tends to adversely affect the repurchase of smartphones or is only a motivator during the first-time purchase but not the second time.

AUTHOR INFORMATION

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