Developing the measurement of Consumer based brand equity in service industry: An empirical study on mobile phone industry

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1.0: Introduction and background:

Building a strong brand is considered the best way of doing business because of the constant changes in the marketing environment (Aaker, 1996; King 1991; Lennon, 1993). Successful brand building could strengthen a producer's competitive position to withstand the increasing power of retailers (Park and Srinivasan, 1994). The high costs associated with the launching of new brands and the high failure rates of new products (Crawford 1993, Ourusoff 1992) as well as increasing costs of advertising and distribution (Aaker 1991) are some of the reasons for the growing interest in brand management. Since its appearance in the 1980s, brand equity has been one of the main priorities in marketing research (Marketing Science Institute, 2002). The concept of Brand equity is regarded as an important business practice as well as in academic research because marketers can gain competitive advantages through strong brands (Aaker, 1998; Keller, 1993, 2000). Brand equity research has largely concentrated on customer-based as opposed to firm-based (financial perspective) (Christodoulides and Chernatony 2004). This is because unlike the firm based approach which centres around financial valuation issues and provides little usable information for brand managers, the customer-based approach offers insights into customer behaviour convertible into actionable brand strategies (Keller, 1993). Lassar et al., (1995) further argues in favour of consumer based brand equity approach by citing two reasons. First, customer-based brand equity is the driving force for incremental financial gains to the firm. Second, managers do not have a customer-based measure to evaluate brand equity.

Measuring brand equity is important due to its strategic value guiding marketing strategy, aiding tactical decisions and providing a basis for assessing brand extendibility (Ailawadi et al., 2003). Thus, it has become essential for brand managers to understand how to measure brand equity (Ambler, 2003). Despite the considerable interest in the concept of brand equity and its measurement, there have been few attempts in the context of service based industries. Although researchers has taken considerable interest in developing scales for CBBE measures however there is a repeated call to validate these measures in various other contexts (e.g Buil et al. 2008, Pappu et al. 2005). Moreover a detailed and rigorous work is necessary by considering all the previous concepts in the context of CBBE.

The number of global mobile phone users has soared to more than 3.3 billion in recent years thereby escalating the adoption of mobile commerce (Australian IT, 2008). Mobile phones have surpassed just being a utility-based communication tool and have now served as a fashion item, a status symbol, and a channel for individuals to express themselves (Sultan and Rohm, 2005).Given the already high mobile phone penetration, the growth of mobile service usage seems assured. Telecom market is identified by some unique characteristics which demands industry specific strategies taken by its marketers to satisfy the consumers. For an example Gerpott et al. (2001) argues, " in mobile phone service services, it is frequently pointed out that once customers have been acquired and connected to a particular operator, their long-term relations with the focal operator are of greater importance to the success of the company in competitive markets than they are in other industry sectors." (pp. 249). Hence, it is argued that mobile phone operators need industry specific understanding to generate the strategies required for a sustainable growth. Given the importance of this industry it is surprising to understand that no previous research has attempted to undertake CBBE measures in the mobile phone industry. At the same time youth market behaves differently than other markets it is more important for the marketers to understand and develop strategies to suit the specific target market. All these important criteria's hint a special need for further investigation to understand the CBBE measures for the mobile phone operators in the youth market so that the practitioners know what needs to be done to create a strong brand equity for their brand.

Conceptual background:

Despite the availability of numerous definitions of brand equity in the literature, there is little consensus on what brand equity means *(*Park and Srinivasa, 1994). Brand equity is defined as the marketing effects or outcomes that accrue to a

product with its brand name compared with those that would accrue if the same product did not have the brand name (Aaker 1991; Keller 2003). The specific effects may be either consumer-level constructs, such as attitudes, awareness, image, and knowledge, or firm level outcomes, such as price, market share, revenue, and cash flow.

Aaker (1991, 1996) has provided the most elaborate concept of brand equity and defined brand equity as "a set of 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 firms customers". He further provides five dimensions of brand equity i.e brand awareness, brand associations, perceived quality, brand loyalty and other brand-related assets.

Lassar et al. (1995) suggested that customer-based brand equity consists of two components: brand strength and brand value. According to him, brand strength refers to the brand associations held by customers and brand values are the gains that accrue when brand strength is leveraged to obtain superior current and future profits.

Keller (2003) has conceptualized CBBE from two perspective a. brand knowledge, formed by the dimensions of awareness and b. brand image; in terms of strong, favourable and unique brand associations to the brand in the memory of consumers-as an indicator of brand equity.

Several researchers (e.g Cobb-walgren et al., 1995, Yoo and Donthu, 2001, 2002, Yoo et al 2000, Washburn and Plunk 2002, Pappu et al., 2005, Buil et al,. 2008) have conceptualised brand equity similar to Aaker (1991) and Keller (2003) and used the term consumer based brand equity to refer brand equity. After a thorough search in the literature the researcher has decided to undertake brand awareness, brand association, brand loyalty and perceived quality as measures of CBBE.

a. Brand awareness:

Aaker (1991) defines brand awareness as the ability of a potential buyer to recognize or recall that a brand is a member of a certain product category. Brand awareness plays an important role in consumer decision-making by influencing which brands enter the consideration set, which of these brands are used as a heuristic, and the perception of quality (Macdonald and Sharp, 2000). During the decision-making process the consumer retrieves, from long-term memory, those products and brands of which they are aware. This small set of brands (the consideration set) is important, since a brand that is not part of the consideration set is unlikely to be chosen (Mowen and Minor, 2001).

b. Brand association:

Brand association is the core asset for building strong brand equity (Chen 2001). Brand associations can be defined as anything that connects the consumer to the brand including user imagery, product attribute, use situation, organizational associations, brand personality, and symbols (Aaker and Joachimsthaler 2000). The more the brand possess strong, congruent, dominant and positive associations, the greater its ability to create performance for its products. Marketers use brand associations to differentiate, position, and extend brands, to create positive attitudes and feelings toward brands, and to suggest attributes or benefits of purchasing or using a specific brand. Consumers use brand associations to help process, organize, and retrieve information in memory and to aid them in making purchase decisions (Aaker, 1991, pp. 109-13). Bridges et al. (2000) argued that strong, positive associations help to strengthen brand and the equity that is carried into a leverage situation if affected by the types association made with the brand.

c. Brand loyalty:

Oliver (1999) defines of brand loyalty as a deeply held commitment to re-buy or re-patronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behaviour. This definition emphasizes the two different aspects (behavioural and attitudinal) of brand loyalty that have been described in previous work on the concept (Chaudhari and Holbrook, 2001). More specifically, researchers have also suggested that focusing only on the behaviour cannot completely capture the reasons behind the purchase and thus the attitudinal dimension is also relevant (Baloglu, 2002). Most researchers Chaudhari and Holbrook (2001); Oliver (1999), Rundle-Thiele and Bennett, (2001) believe that the best way to operationalize brand loyalty is to measure both attitudes and behaviour.

d. Perceived quality.

Perceived quality is defined as "the consumer's judgment about a product's overall excellence or superiority" (Zeithaml, 1988, p. 3). It is not the objective quality of the product but consumers' subjective evaluations which depend on their perceptions. The provision of products and services of high quality enhances reputation, improves customer retention, attracts new customers through word of mouth, and increases financial performance and profitability (Julian and

Ramaseshan, 1994; Zeithaml, 1996).

Telecom industry in Australia:

The mobile communications industry is a high cost and high revenue industry that is making substantial contribution to the Australian economy (The Allen Consulting Group, 2005;). In Australia, youth, aged 16–24 years, are recognized as the most prolific users of mobile phones. Australian operators are targeting the youth market and prepaid users, which as of 2005 constituted 55 per cent of the market, with competitive pricing plans and a greater selection of data services (Field, 2006). As a reason, mobile phone penetration among young Australians is high, with the LifeLounge report estimating that only 1.3 per cent of 16-29 year old Australians do not have a mobile phone (Lifelounge, 2006). As current youth are the first generation to have grown up with mobile technology, they have incorporated the device into their lives.

A quick look at the pervious literature reveals that there is a tremendous lack in the literature regarding developing scale for CBBE in the context of service industry. Given the importance of the growth of mobile phone industry in the world as being one of the fastest growing industries in the world, it is surprising to know that researchers have neglected this industry to develop a CBBE measure. Moreover, although some research has been undertaken to measure CBBE in the context of product but most of the previous researchers have used different measures, comprising different dimensions, and none of them have really taken a detailed and rigorous approach to measure CBBE.

It is very surprising to find the amount of gaps in the literature when it comes to measuring one of the important aspects of marketing strategy. As Pappu et al. (2005) points out, "despite considerable interest in the concept of consumer based brand equity, there have been few attempts at its measurement and scale development" (pp. 151). Researchers (Yoo and Donthu 2001, Washburn and Plunk 2002, Buil et al. 2008) have also acknowledged the scope to improve the measurement of consumer based brand equity. For example Washburn and Plunk (2002) highlighted the need to refine the dimensionality of consumer based brand equity. Also Pappu et al., (2005, pp 143) states, "developing further insights into the measurement of consumer-based brand equity is important in the face of the prominence of branding". So a detailed and rigorous research should be undertaken to know more about the CBBE measures in the context of the service, which is the primary focus of this study.

2.0: Objectives of the study:

1. **Developing a valid CBBE measures for service firms,**

2. **Understanding the differences in the CBBE measures in service marketing than products,**

3. **Developing specific strategies to create CBBE in the mobile phone industry,**

4. **Identifying the differences in strategies in service compared to product to create CBBE.**

Hypothesis:
1. **CBBE of a brand in service is different from CBBE in product,**
2. **Strong brand knowledge for a service brand helps to create strong brand equity;**
3. **Strong brand associations for a service brand helps to create strong brand equity;**
4. **Strong brand loyalty for a service brand is positively related to brand equity,**
5. **Superior perceived quality regarding a service brand helps it create strong brand equity.**
6. **Overall strategies to create brand equity in service are different than products.**

3.0: Methodology:

3.1: Measures:

An up to date and thorough literature review will be undertaken in this thesis to identify the specific items to develop individual measures of CBBE. To establish content validity the items will then be evaluated for conformity to the theoretical definitions and redundancy. It is identified that most of the previous researchers Washburn and Plunk (2002), Pappu et al. (2005) and Buil et. al. (2008) used similar items in most of the brand equity measures. So a detailed, up to date and rigorous literature review is required to further develop and test the items that are related to measure CBBE scale. Being a service firm as a focus of this study more detailed investigation is required to develop measures that are related to service firms, as it is argued that service marketing is different from product marketing (Kotler et al, 2009).

5.2: Stimuli:

This research will be conducted in such a way that the result could be generisable in various other service industries. The major mobile phone brands operating in Australia i.e Optus, Telstra, Virgin, and Vodafone and 3 will be considered for this study.

5.3: Instrumentation:

The questions will be in Lickert scale of 1 to 7 using the anchors "strongly agree" to "strongly disagree". Confirmatory factor analysis using structural equation modelling will be used for testing the multidimensionality of the CBBE construct. Confirmatory factor analysis is a relevant technique for the validation of scales for the measurement of constructs (Steenkamp and Van Trijp 1991). At the end regression analysis will be used to establish the relationship between independent variables (brand awareness, brand loyalty, perceived quality and brand association) with the dependent variable brand equity.

5.4: Sample and procedure:

Data will be collected from Australia. Data will be collected through TAFE colleges; Universities and mall intercept from customers in Brisbane and Gold Coast. Systematic sampling procedure will be used to collect data. The population characteristics for this research is 16 to 29 age group male or female with any ethnic, professional and income segment, who are using mobile phone for at least one year. University students and shopping mall buyers matching with these characteristics will be approached as it is easier and also less costly to administer. The researcher is considering shopping mall along with university as shopping mall consumers are from more diverse background, e.g education, social class, lifestyle etc. Systematic sampling will be utilized; through this approach each element in the population will have a known and equal probability of selection which makes systematic sampling functionally similar to simple random sampling. So the researcher feels that this method will reduce the sampling error and it will represent the population for a valid measure of any statistical analysis.

5. Benefits of the study:

This research will identify the issue of developing a valid measure of a CBBE scale for the service industry which is demanded both by the fellow researchers and also practitioners for a long time.

The managers and/or practitioners will be able to develop their brand equity through the items developed by this research. Through these scales they will be able to point out the areas where the brand is not performing at its best, and then they can develop long term and short term strategies to improve the brand's equity.

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