

Comparative Study of Brand Equity - A Kevin Lan Keller Approach of Brand Knowledge Structure

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Abstract

Brand knowledge exists in consumer minds in the form of brand awareness and brand image. High level of brand awareness and positive brand image has the increased probability of a particular brand choice. This study was an attempt to measure the brand equity of two famous shampoo brands namely Head & Shoulder and Pantene by applying the conceptual framework of brand knowledge structure stated by Keller. Various statistical tools like Mean analysis and t-test were used to determine the brand equity of both the shampoo brands. Results indicate that Pantene has slightly higher brand equity than Head & Shoulder. Moreover, Current users have more favorable image and awareness level about both the shampoo brands compared with the non-current users.

Brand Equity is the added value that a brand name gives to a product (Aaker, 1991). He further states that brand equity is "The marketing effects or outcomes that accrue to the product with its brand name as compared to the outcomes that would accrue if the same product did not have the brand name". Customer based brand equity can be measured with two basic approaches; Direct and Indirect Approach (Keller, 1993). Both direct and indirect approaches attempt to assess potential sources of customer-based brand equity. More specifically indirect approach attempts to assess by measuring brand knowledge. High level of brand awareness and a positive brand image implies the probability of brand choice and greater consumer loyalty and thus the higher brand equity that's intended to be Increased by the marketing mix of the brand. Direct approach attempts to measure customer-based brand equity more directly by assessing the impact of brand knowledge on consumer response to different brand equity, both the approaches are complementary and should be used together (Keller, 1993).

There are two schools of thoughts regarding the meaning and valuation of the term "brand equity". Farquhar, (1989) and Brasco, (1988), define brand equity based on the financial value that the brand generates for the firm. Another school

of thought considers brand equity from consumer's perspective (Kim & Lehman 1990; Rangaswamy, Burke & Olive 1993). Customer-based brand equity is defined as the differential effect of brand knowledge on consumer response to the marketing of the brand (Keller, 1998). Accordingly, three important concepts are included in this definition which are "differential effect", "brand knowledge" and consumer response to marketing of the brand. Thus, according to this definition, a brand is said to have positive or negative customer-based equity if consumers react more or less favorably to the product, price, promotion, or distribution of the brand than they do to the same marketing mix element when it is attributed to a fictitiously named or unnamed version of the product or service.

From the perspective of the customer-based equity framework stated by Keller (1998), brand knowledge is the key to creating brand equity. Accordingly, the concept of customer-based brand equity is the intensity of the knowledge about the respective brand in consumer mind. The knowledge exists in the form of brand awareness and the brand image. He further breaks down the brand awareness into brand recall and brand recognition. A person recalls ability and the power of recognizing the brand among other competing brands constitute the level of awareness of that respective brand. Similarly, the other dimension of brand image can be measured through obtaining an insight into the type of associations linked by consumers about the respective brand in his/her mind, the strength as well as the uniqueness of those associations. (Keller, 1998)

Brand name awareness relates to the likelihood that a brand name will come to mind and the ease with which it comes to mind. Brand awareness further consists of brand recognition and brand recall performance. Brand recognition relates to consumers ability to conform prior exposure to the brand when given the brand as a cue. Brand recall relates to consumers' ability to retrieve the brand when given the product category, the needs fulfilled by the category, or some other type of probe as a cue (Keller, 1993).

Consistent with the definitions stated by Newman (1957) among others, and an associative network memory model of brand knowledge, brand image is defined here as perceptions about a brand as in the form of brand associations held in consumer memory. Brand associations are the other informational nodes linked to the brand node in memory and contain the meaning of the brand for consumers (Keller, 1998). The favorability, strength, and uniqueness of brand associations are the dimensions distinguishing brand knowledge (Keller, 1998). Brand associations take different forms. According to Alba and Hutchinson (1987), and as also agreed by Chattopadhyay and Alba (1988), Johnson (1984) and Russo and Johnson (1980), one way to distinguish among brand associations is by their level of abstraction. Along this dimension, Keller (1998) states that brand

associations can be classified into three major categories of increasing scope: attributes, benefits, and attitudes. He defines Attributes as those descriptive features that characterize a product or service-what a consumer thinks the product or service is or has and' what is involved with its purchase or consumption. Benefits are the personal value consumers attach to the product or service attributes, e.g., what consumers think the product or service can do for them.

Regarding the valuation approaches, Brand equity measurement can also be grouped into the same consumer and financial groups. Park and Srinivasan (1994), Mackay, Romaniuk and Sharp (1997) provide a typology of brand equity measurement. Crimmins (1992) and Farquhar (1989) favor of the financial perspective, whereas Srivastava and Shocker (1991) argue in favor of the consumer perspective. The financial school of thought argues that there is more objectivity in the financial aspect of measuring brand equity. The consumer school of thought argues that it is the consumer who determines the brand equity and hence this type of measurement is more appropriate and authentic.

As the focus of this study is the measurement of customer's-based brand equity, it is appropriate to provide a brief review of customer-based brand equity measurement methods. Most of the brand equity measurement methods measures equity at the aggregate level or segment level conjoint analysis method is used by Green and Srinivasan (1978) to measure brand equity at the segment level. However, the use of unrealistic product profiles has made the scope of this method limited. Hence, a variant of the conjoint methodology was developed by Srinivasan (1979). He estimates brand equity by comparing actual consumer choice with that implied by utilities obtained through conjoint analysis. Although Srinivasan (1979) overcomes the problem of unrealistic product profiles by eliminating these product configurations, he too only provides segment level estimates. Cobb-Walgren, Ruble and Donthu (1995) follow Aaker's (1991) definition of brand equity. They measure brand equity by employing the perceptual components of Aaker (1991). They operationalize brand equity as a set of perceptual components such as brand awareness, brand Associations and perceived quality. However, as they use a simple weighted average to combine the individual components, it has also a limited scope. Park and Srinivasan (1994) developed a survey-based method for measuring brand equity. This measures brand equity at the individual level. This method however assumes that there are no errors in the utility measurements.

Why brand equity has got so much research interest is that Brand equity plays a vital role in managerial decision making. However, it does so if the equity of the brand is measured properly. This study is an attempt to measure the brand equity

of two famous shampoo brands namely Head & Shampoo and Pantene by applying the conceptual framework of brand knowledge structure stated by Keller (1998). To measure the respective brand equity, the level of brand's knowledge in consumer minds is assessed about these two brands.

Method

Subjects and Measuring Instrument

The participants were all volunteer undergraduate and postgraduate students of business and management institutes in Peshawar University as well as students of the institutes outside the university campus.

To ensure the validity and reliability of the data and the overall research study, the measuring instrument used was based on the work done by Yoo, Donthu and Lee (2000) and Lasser, Mittal and Sharma (1995) cited in Villarejo-Ramos and Sanchez-Franco (2005). The questionnaire was adapted to the local environment. It was pre-tested and Cronbach alpha test of reliability was applied ($\text{Alpha} = 0.93$) to get the authenticity and validity of the instrument.

To further validate the responses, each student was informed about the purpose of the study and asked whether he (she) is willing to participate in the research study. Subsequent upon their willingness to do so, questionnaires were distributed to a total of 340 students representing both genders.

Results

Brand Awareness [Head & Shoulder]

The data collected and analyzed on the awareness of the Head & Shoulder shampoo is shown in table which indicates that Head & Shoulder has almost slightly higher Mean awareness among the Current users as compared to Non-Current users. This difference arises from the awareness factors stated as the brand recognition factor, and the knowledge about the characteristics of the brand like price, how it looks like, color of the shampoo etc. (results of these two factors are significant at $P = 0.05$).

Table 1

Brand Awareness of H&S among Current and Non-Current Users

Items	Mean Current Users	Mean Non-Current Users	p-value
Recognize brand	4.57	4.05	0.011*
Name awareness	4.26	4.51	0.433
Knowledge about H&S	3.80	3.28	0.000*
Mean Brand Awareness	4.21	3.94	

1= Strongly Disagree and 5= Strongly Agree *Significant at p=0.05

Brand Image [Head & Shoulder]

Table 2 illustrates the Mean score on the Brand Image of the two shampoo brands among the current and non-current users. Result shows that there are significant differences between the means for the two groups (Current and Non-Current Users) on either statement in table 2. The major difference arises due to two factors: first, the mean score on consumer satisfaction with respect to price in return for the quality and benefits they receive is very high among the Current users compared to non-current or past users. Secondly, the intangible attributes of the brand like color and brand name are one of the important factors among current users compared to non-current users. (Both the statements are significant at p=0.05).

Overall, current users are agreeing with the statements reflecting the brand image with a mean brand image score of 3.83 compared with the non-users whose mean image about Head & Shoulder is 2.73. They seem to be not clear or somewhat neutral of the image statements about Head & Shoulder.

Table 2

Brand Image of H&S among Current and Non-Current Users

	Mean Current Users	Mean Non-Current	p-value
Free association	4.23	3.83	0.000*
Logo recall'	3.91	3.59	0.002*
Personality of brand	3.90	3.26	0.000*
Knowledge about people who use H & S	3.41	3.05	0.001*
Image of brand	4.20	3.52	0.000*
Reasons to buy	3.63	.09	0.000*
Value to price	3.76	.09	0.000*
Very attractive brand	3.78	3.34	0.000*
Likeability among people	3.73	3.24	0.000*
Different quality	3.77	3.34	0.000*
Mean Brand Image	3.83	2.73	

1= Strongly Disagree and 5= Strongly Agree 0.05. *Significant at p=

Brand Knowledge (Brand Equity) - [Head & Shoulder]

Table 3 illustrates the Mean score on the level of brand knowledge in consumer minds, in other words, the sources of the Brand equity about Head & Shoulder among the current and the non-current users. Head & Shoulder has slightly more favorable brand image and high brand equity among the current users compared to non-current users. The major contributing factors for the difference in the brand equity among the two groups are almost the same as those for the brand image which are consumer's satisfaction with respect to price in return for the quality, benefits they receive from the purchase of the brand and the consumer's greater importance for the intangible factors while buying the brand. (Result significant at $p= 0.05$). Other contributing factors are image of the brand, free association, attractiveness of brand, consumer's knowledge about the brand and the consumer's perception of the uniqueness of quality. (All significant at $p=0.05$).

Table 3
Brand Equity of H&S among Current and Non-Current Users

Items	Mean Current Users	Mean Non-Current Users	P-value
Name awareness	4.57	4.51	0.433
Knowledge about people who use	3.41	3.05	0.001*
Recognize brand	4.26	4.05	0.011*
Logo recall	3.91	3.83	0.002*
Free association	4.23	3.59	0.000*
Personality of brand	3.90	3.26	0.000*
Image of brand	4.20	3.52	0.000*
Reasons to buy	3.63	.09	0.000*
Value to price Ratio	3.76	.09	0.000*
Very attractive brand	3.78	3.34	0.000*
Likeability among people	3.73	3.24	0.000*
Knowledge about H& S	3.80	3.34	0.000*
Different in quality	3.77	3.28	0.000*
Brand Equity of HS	3.91	3.01	

1= Strongly Disagree and 5= Strongly Agree

* Significant at $p= 0.05$.

Brand Awareness [Pantene]

Table 4 indicates the Mean awareness for Pantene. The findings almost substantiate the previous finding of brand awareness for Head & Shoulder, both among the Current users as well as non- Current users. However, non-current

users of Pantene are slightly less aware as compared to the ratio between the non-current users to the current users of Head & Shoulder. Most of the non-current users of Pantene are less clear about the characteristics of the brand like benefits the brand provide, type of people who use it etc.

Table 4
Brand Awareness of Pantene among Current and Non-Current Users

Item	Mean (Current Users)	Mean (Non-current users)	P-value
Name aware	4.53	4.28	0.000*
Correct Recognition	4.39	4.03	0.000*
Know Pantene	3.89	3.05	0.000*
Mean Brand Awareness	4.27	3.78	

1= Strongly Disagree and 5= Strongly Agree

*Significant at p= 0.05.

Brand Image: [Pantene]

There are statistically significant differences between the means for the two groups (Current and Non-Current Users) on either statement in table 5. Like Head & Shoulder, although, the mean scores on brand image of Pantene shows that non-current users have an unfavorable perception of the image factors about Pantene. However, as a matter of fact and as the data shows, the major differentiating factors which are the consumer satisfaction with respect to price among non-current users and the intangible attributes of the brand like color and brand name etc. are least important among the non-current users.

Table 5
Brand Image of Pantene among Current and Non-Current Users

Items	Mean (Current Users)	Mean (Non-Current Users)	p-value
Shine Association	4.20	3.37	0.000*
Logo recall	3.98	3.29	0.000*
Strong personality	4.16	3.27	0.000*
Knowledge of people using Pantene PIPPanTenp	3 80	3.11	0.000*
Brand Image	4.08	3.42	0.000*
Reasons to Buy	3.79	0.01	0.000*
Value to Price	3.92	0.01	0.000*

Attractive brand	3.98	3.39	0.000*
Likeability by People	4.04	3.25	0.000*
Uniqueness of Quality	4.04	3.21	0.000*
Mean Brand Image	3.99	2.63	

1 = Strongly Disagree and 5= Strongly Agree * Significant at p= 0.05.

Brand Knowledge (Brand Equity) - [Pantene]

Table 6 illustrates the Mean brand equity score (Brand Knowledge) for Pantene among the current and non- current users. Compared to Head & Shoulder, there is slightly greater unfavorable response to the image of Pantene among the non-current consumers category. However, on overall, consumers have high level of equity for Pantene among the current users as compared to Head & Shoulder, i.e., the level of consumer knowledge of the brand is higher for Pantene than Head & Shoulder.

Table 6
Brand Equity of Pantene among Current and Non-Current Users

Items	Mean (Current Users)	Mean Non-Current Users	p-value
Name awareness	4.20	4.28	0.000*
Correct Recognition	3.98	4.03	0.000*
Know Pantene	4.16	3.05	0.000*
Shine Association	3.80	3.37	0.000*
Logo recall	4.08	3.29	0.000*
Strong personality Knowledge of people using Pantene	3.79	3.27	0.000*
Pantene	3.92	3.11	0.000*
Brand Image	3.98	3.42	0.000*
Reasons to Buy	4.04	0.01	0.000*
Value to Price	4.04	0.01	0.000*
Attractive brand	4.53	3.39	0.000*
Likeability by People	4.39	3.25	0.000*

Uniqueness of Quality	3.89	3.21	0.000*
Brand Equity	4.06	2.89	22

1= Strongly Disagree and 5= Strongly Agree (*Significant at $p= 0.05$.)

Discussion

The results of this study suggest that there are significant differences on almost all the statements (items) of brand awareness and brand image among the current and non-current users. Results particularly indicate that current users of both the brands have greater knowledge about the brands in almost all respects. On the basis of this understanding and knowledge, their understanding about the likeability of the brands is also high, which is quite logical. The same findings are not true for non-current users of the brands.

Furthermore, the current users of the brands consider many reasons to buy the brands. They also give more value to the brands in relation to the price they pay for the brands. Hence their response to attractiveness of the brands is also high. The same findings are not true for non-current users of the brands. Thus, it can be concluded that current users of the brands have high level of brand knowledge and hence high brand equity as compared with the non-current users.

Implications

The concept of brand equity according to the brand knowledge structure of Keller (1998) was implemented for the first time. This study has especially contributed a new way to the existing indirect approaches of brand equity measurement.

This framework is easy to understand and of greater importance while chalking out branding strategies, especially in those cases where the businesses lack well qualified professionals. Moreover, this study also contributes towards an applied approach to brand audit and brand tracking studies which are carried out to know about the position of the brand in the market. Above all, this is an addition to the available brand equity measurement methods. Marketers can very easily adopt it to know about the perceptions of the target market about the brand as well as to know about the level of awareness of the brand. Thus in the light of such findings, management can structure their marketing strategies accordingly.

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