



An analytical study on different branding elements of customer-based brand equity for two-wheelers

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Abstract

The purpose of this study is to identify relationship of different branding elements on Customer-Based Brand Equity (CBBE). The study proposes an analytical approach for measuring CBBE. The approach takes into account five different branding elements—brand uniqueness, brand imagery, brand performance, brand loyalty and brand resonance—and evaluates the spillover effect of the branding elements. Structural equation modeling technique is used to find the spillover effect of different branding elements on brand equity measured by brand resonance. The findings reveal that the impact of brand loyalty and brand performance is significant in influencing the brand equity of two-wheeler industry.

Keywords: brand equity, customer-based brand equity model, two-wheeler industry

Introduction

Since the emergence of the term 'brand equity' in the 1980s, different researchers have defined it in different ways. Reviewing the existing literature, it can be clearly stated that brand equity involves two aspects: consumers' behavioral response to the brand, examined mainly by Customer-Based Brand Equity (CBBE) model and financial impact of the brand as expressed through return on investment, profit, turnover, etc., referred to as financial equity. Researchers have tried to establish the relationship between different brand elements and brand equity by defining brand equity in different ways. Chaudhuri and Holbrook (2001) [8] defined brand equity outcomes as market share, price and shelf spacing and found the impact of brand attitudes and brand loyalty on brand outcome. Keller (2001) defined brand equity as brand strength in terms of market leadership and market share. Keller and Lehmann (2003) introduced 'brand value chain' model and measured brand equity as brand performance in terms of price elasticity and premiums, cost structure, market share, profitability and expansion success.

Researchers have used different branding elements to measure CBBE, which provides a unique perspective on what brand equity is and how these elements influence brand equity. Against this backdrop, the present paper attempts to empirically test the interrelationship of different branding elements with CBBE, especially for two-wheelers.

Two-Wheeler Industry: An Overview

India's two-wheeler industry is set to record its fastest growth in at least five years in fiscal 2017, boosted by plentiful monsoon rains that invigorated the key rural market and higher spending expected in cities because of a salary hike to government staff.

Industry players are predicting the market to grow at least in high single digit in current fiscal year through March 2017. If

the monsoon rains continue to be plentiful, the rate may even break into double digits.

With softening fuel prices and easing interest rates, fundamentals are already in place to drive demand, they said. Two-wheeler sales last grew in double digits in fiscal 2012, when the increase was 14%. Since then, the growth has been between 3% and 8%.

Literature Review

Today, branding is such a strong force that hardly anything goes unbranded. In order to meet the challenges posed by competitors, marketers and researchers have identified the role of brand equity constructs. For the purpose of this study, the literature addressing the major branding elements which influence the measurement of brand equity from customer's point of view is reviewed.

Chaudhuri and Holbrook (2001) [8] conducted a study to find the relationship between brand trust, brand effect and brand performance outcomes (market share and relative price) with purchase loyalty and attitudinal loyalty. This empirical study was conducted in three phases. They found that brand trust and brand effect are both indirectly related to market share and relative price, and indirect linkage occurs through the constructs of purchase loyalty and attitudinal loyalty. Brand trust and brand effect are both directly related to attitudinal loyalty and purchase loyalty.

Keller (2001) proposed a brand building model which involves four steps:

- a) Establishing the proper brand identity;
- b) Creating the appropriate brand meaning;
- c) Eliciting positive brand responses; and
- d) Forging brand relationship with customers who are characterized by intense active loyalty. Achieving these four steps involve six brand building blocks, namely, brand salience, brand performance, brand imagery, brand

judgment, brand feelings and brand resonance. The first step of this model is to ensure identification of the brand with customers and an association of the brand in customers' minds with a specific product class or customer need. The second step is to firmly establish the brand meaning in the minds of the customers by strategically linking a host of tangible and intangible brand associations. The third step is to elicit the proper customer responses to this brand identity and brand meaning. The fourth and final step of this model is conversion of brand response to create intense, active loyalty relationship between customers and the brand. The model provides a comprehensive way of covering important branding topics, as well as useful insights and guidelines for marketers to help them to set strategic direction and inform their brand-related decisions.

Keller (2003) analyzed the key issue, i.e., synthesizing the multidimensionality of branding elements to measure brand knowledge. This study is a representation of brand knowledge based largely on cognitive psychology. It demonstrated that consumer brand knowledge relates to the cognitive representation of the brand. The study defined consumer brand knowledge in terms of all descriptive and evaluative information of a brand stored in the consumer's memory. According to this study, the multiple dimensions of brand knowledge are awareness, attributes, benefits, images, thoughts, feelings, attitudes and experiences.

Lassar *et al.* (1995) conducted a perceptual study of CBBE. In their study, they developed and presented a scale to measure CBBE. This scale was developed after four studies in which they narrowed the initial scale of 83 items to a scale of 17 items. The five variables used in the empirical model of their study are: performance, social image, values, trustworthiness and attachment. The final study was administered to 113 consumers for 17 brands including three brands of TV monitor and three brands of watches under durable sector. The results show that price of a product reflects the equity associated with the brand. One of the major limitations of this study is that they have not defined the sample area and all the 17 brands.

Tong and Hawley (2009) conducted an empirical study to examine the practicality and applications of a CBBE model in the Chinese sportswear market. They measured the brand equity based on Aaker's conceptual framework of brand equity, by using structural equation modeling to investigate the causal relationships among the four dimensions of brand equity and overall brand equity in the sportswear industry. The results of the study show that brand association and brand loyalty have direct effect on brand equity but they could not find any positive relation of brand awareness and perceived quality with brand equity.

Srinivasan *et al.* (2005) in their study proposed a new approach for measuring, analyzing and predicting a brand equity in a durable product market (cellular phone). The approach takes into account three sources of brand equity, namely, brand awareness, attribute perception biases, and non attributes. The results of the study show that among the three sources of brand equity, brand awareness contributes to brand equity the most, and it is the most important attribute for measuring brand equity, followed by non-attribute preference

and, to a smaller extent, enhanced attribute perceptions. They also found that the impacts of a brand's equity on the leading brand's market share and contribution are substantial.

Mishra and Datta (2011) proposed a model to discuss the importance of the effect of the brand assets treated as antecedents like brand name, awareness, personality and consequences like brand preference and purchase intention on CBBE. They conducted an empirical study on the brand Nokia in the cities like Cuttack and Bhubaneswar. The study established that brand loyalty, brand association, brand name and brand communication should be enhanced for increasing CBBE. The results also show that brand preference does not always enhance purchase intention.

David *et al.* (2012) ^[9] conducted a study to evaluate the CBBE for two-wheeler segment in India for the brand, Hero Honda. They adopted Aaker's model of brand equity which incorporates four assets, namely, brand awareness, brand loyalty, perceived quality and brand association in their research study. They found perceived quality and brand awareness are the most influential assets and positively trigger the CBBE of Hero Honda bikes.

The findings of prior research suggest that brand preference, brand image, and brand loyalty are the major branding elements that influence CBBE. However, most of these studies have been carried out in the developed countries and very few have been done in the context of Indian market. The present study attempts to fill the gap by evaluating global and Indian brand equity and identifying the spillover effect relationship of different branding elements in developing the brand equity of global and Indian brands of durable products.

Data and Methodology

This study was undertaken in Coimbatore, which is one of the most important places in South India. The study employs descriptive research approach and adopts survey method for data collection. In order to make the research manageable the universe of the proposed study is on consumers within the Coimbatore city. The sampling units chosen for the research are respondents above the age of 18 years and who possess or intend to purchase a two-wheeler. It is expected that the variables influencing the brand equity of these consumers will be similar to those influencing consumers elsewhere in India as the floating customers are also considered.

The sample size is determined both by qualitative and quantitative approach. By taking an error level of 10% and standard error at 0.66 (based on Likert scale range of 1-5), quantitatively the sample size at 95% confidence level happens to be 170. As the study wants to unearth much information and also intends to use sophisticated multivariate techniques, hence a large sample size is decided and accordingly the sample size of 250 is considered for two-wheelers.

The current research is undertaken with a variety of brands to allow a broader generalization in two-wheeler market. Based on the market share of different brands in two-wheeler market both globally and in India, two brands were selected for the study: Honda – Global brand having market share of 28.60% in India and TVS – Indian brand having market share of 14.24 in India (mainly in two-wheeler segment)

Theoretical Perspective

In this study, for measuring brand equity, mainly CBBE model (as proposed by Keller, 2001) has been used. Though there is a minute difference between brand resonance and brand loyalty, Keller (2001) has not differentiated between brand resonance and brand loyalty. So, this study uses brand resonance to measure brand equity, which reflects the depth of the psychological bond that customers have with the brand as well as the level of activity that reflects loyalty. Kakati and Choudhury (2013) suggested that out of the six brand building blocks (brand salience, brand performance, brand imagery, brand judgment, brand feelings and brand resonance), the last building block, i.e., brand resonance, is considered to be most important by brand managers as it has been experienced that high resonance leads to high loyalty.

Structural equation modeling has been used to find the spillover effect of different branding elements and brand resonance. In order to measure the spillover relationship, the following brand constructs have been identified for the study:

- Brand Uniqueness
 - Brand Imagery
 - Brand Performance
 - Brand Loyalty
 - Brand Resonance
- **Brand Uniqueness:** Keller (2001) defined brand uniqueness as how distinctively the brand is identified with brand association.
 - **Brand Imagery:** Brand imagery deals with the extrinsic properties of the product or service, including the ways in which the brand attempts to meet customers' psychological or social needs. Brand imagery is how people think about the brand abstractly rather than what they think the brand actually does.
 - **Brand Performance:** A brand has to express its meaning through certain associations formed directly from a customer's own experiences and contact with the brand or indirectly through the depiction of the brand in advertising or by other means of communication. According to Keller, brand performance refers to the intrinsic properties of the brand in terms of inherent product or service characteristics. These features are related to the functional performance of the product and are expected by all consumers.
 - **Brand Loyalty:** Oliver (1999, p. 33) defined loyalty as a deeply held commitment to rebuy or repatronize 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 behavior.
 - **Brand Resonance:** Brand resonance is characterized in terms of intensity or the depth of the psychological bond that customers have with the brand as well as the level of activity that reflects loyalty. In this study an attempt has been made to measure brand resonance in terms of behavioral loyalty.

In this study, brand resonance has been used to reflect brand equity of global and Indian brands. Accordingly, the following hypotheses are formed to find the causal relationship among

the brand constructs:

- *H₁: Brand uniqueness has a significant positive direct effect on brand resonance.*
- *H₂: Brand imagery has a significant positive direct effect on brand resonance.*
- *H₃: Brand performance has a significant positive direct effect on brand resonance.*
- *H₄: Brand loyalty has a significant positive direct effect on brand resonance.*

The questionnaire has been constructed for the two brands of two-wheelers, Honda (Global brand) and TVS (Indian brand). The questionnaire measures the branding constructs on a 5-point rating scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree (Table 1).

Table 1: Measurement of Brand Constructs for Two-Wheelers

Attributes	Measuring Statements (on a 5-point rating scale)
1. Brand Uniqueness: The characteristics that makes the brand special	This brand is very unique This vehicle offers advantages which others cannot This vehicle offers superior services compared to other brands in this category
2. Brand Performance: Intrinsic properties of the brand	How convenient is it to use this vehicle? How durable is this vehicle? How stylish do you find this vehicle? How efficient is this vehicle after sales service? To what extent does this vehicle give offers? How efficient is this vehicle regarding fuel consumption?
3. Brand Imagery: Extrinsic properties of the brand, including the ways in which it attempts to meet customer's psychological or social needs	How convenient is this vehicle to purchase? How attractive do you find the advertisement of this vehicle? How is warranty service of this vehicle? How easy is it to ride this vehicle? This vehicle has a very good slogan The packaging of this vehicle is attractive
4. Brand Loyalty: The extent of faithfulness and positive behavior of consumers towards a particular brand.	I feel good when I purchase this vehicle I am happy to buy this vehicle This vehicle gives me pleasure
5. Brand resonance: It is characterized in terms of intensity or depth of the psychological bond that customers have with this brand as well as the level of activity that reflects the loyalty	I will buy this vehicle again this time I intend to keep purchasing this vehicle I am committed to this vehicle I am willing to pay a high price for this vehicle

Results and Discussion

To carry out structural equation modeling, in the first stage, the measurement model is analyzed to ensure sufficient

reliability and validity of constructs comprising branding elements. In the second stage, the hypotheses of relationship between the constructs are tested. The study employs the model fit criteria recommended by Hu and Bentler (1999): 2/df, Goodness-of-Fit Index (GFI), Comparative Fit Index (CFI), and Root Mean Square Residual (RMR). The acceptable models should have (2)/df 3, RMR 0.1 and GFI and CFI > 0.90

The structural equation model is developed to assess the statistical significance of the proposed relationships between overall brand equity (measured by brand resonance, the endogenous variable) and its dimensions (brand uniqueness,

imagery, performance and loyalty, the exogenous variables). Here, all of the four exogenous variables are assumed to be inter-correlated.

First, Cronbach’s alpha coefficients are used to examine the internal consistency of the constructs. Examining all the items of the different constructs, it is found that high inter-correlation among items leads to medium to high internal consistency as represented by Cronbach’s alpha (Table 2). Thus, the study uses 21 items retained in the five constructs. Second, a Confirmative Factor Analysis (CFA) with Amos 20.0 Graphics software is performed for the measurement model with five constructs.

Table 2: Confirmatory Factor Analysis for the Constructs of two-wheelers (Global and Indian Brands)

Attributes	Standardized factor loading for HONDA	Cronbach’s Alpha value for HONDA	Standardized factor loading for TVS	Cronbach’s Alpha Value for TVS
Factor 1: Brand Uniqueness		0.816		0.792
This brand is very unique.	0.75		0.63	
This brand offers advantages that other brands cannot	0.80		0.57	
This brand is superior compared to other brands in this category	0.66		0.50	
other brands in this category.				
Factor 2: Brand Imagery		0.733		0.817
Convenient to purchase	0.67		0.69	
Attractive Advertisement	0.79		0.72	
Warranty Services	0.89		0.56	
Factor 3: Brand Performance		0.707		0.864
Convenient to use	0.80		0.84	
Durability	0.76		0.87	
Stylish	0.73		0.71	
Consumes less electricity	0.82		0.65	
After-sales service	0.64		0.52	
Offer		0.52		0.53
Factor 4: Brand Loyalty		0.908		0.904
Feel good	0.81		0.80	
Happy	0.89		0.79	
Pleasure	0.78		0.80	
Factor 5: Brand Resonance		0.871		0.892
Next purchase	0.80		0.65	
Intend to purchase	0.66		0.73	
Committed to the brand	0.83		0.70	
Willing to pay high price				

Global Brand – Honda

By developing the structural equation model with the inputs of the global brand (Honda), it is observed that the measures of fit show that the model is acceptable with (2)/df = 2.52 ($p < 0.000$), GFI = 0.91 and CFI = 0.95 (being greater than 0.90), and RMR = 0.02 (being less than 0.10). The results obtained for the global brand (LG) are presented in Tables 3 to 5 and Figure 1.

This model is then used to examine the statistical significance of the spillover effect of the branding elements on brand

equity. Although the four exogenous constructs were proposed to be the antecedents of brand equity, the estimated model results support only three of the four relationships (Table 3). The results indicate that for the global brand (Honda), brand loyalty, brand performance and brand uniqueness positively affect the brand equity (measured by brand resonance). It is observed from Table 5 that though the inter- correlation between brand performance and brand imagery is positive (= 0.707, $p < 0.000$), the spillover effect of brand imagery on brand resonance is not significant.

Table 3: Spillover Effect of Branding Elements on Brand Equity of Honda

Hypothesis	Relationship	Standardized coefficient	t-Value	p-Value
H_4	Brand Resonance ← Brand Loyalty	0.953	3.34	0.00
H_3	Brand Resonance ← Brand Performance	0.030	4.73	0.00
H_2	Brand Resonance ← Brand Imagery	-0.051	-0.56	> 0.05
H_1	Brand Resonance ← Brand Uniqueness	0.038	3.12	0.00

Table 4: Direct Effect n–Honda

	Brand Uniqueness	Brand Imagery	Brand Loyalty	Brand Performance
Brand Resonance	0.038	-0.040	1.041	0.025

Table 5: Correlations among Exogenous Constructs n – Honda

Exogenous Construct	Brand Uniqueness	Brand Imagery	Brand Performance	Brand Loyalty
Brand Uniqueness	1.00			
Brand Imagery	0.063	1.00		
Brand Performance	-0.011	0.707**	1.00	
Brand Loyalty	0.417**	0.021	0.00	1.00

Note: ** implies that the factor has significant spillover relationship supporting the hypothesis.

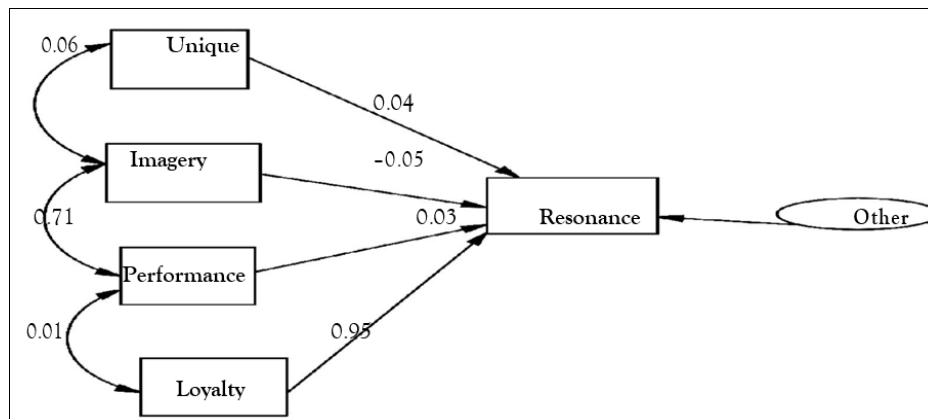


Fig 1: Relationships between Four Branding Elements and Brand Resonance for Honda

Indian Brand – TVS

Similarly, by developing the structural equation model with the inputs of the Indian brand (TVS), it is observed that the measures of fit indicate that the model is acceptable with (2)/df = 2.89 ($p < 0.000$), GFI = 0.97 and CFI = 0.98 (being greater than 0.90) and RMR = 0.04 (being less than 0.10). The results obtained for the Indian brand (TVS) are presented in Tables 6 to 8 and Figure 2.

The results of this estimated model support only two of the

four relationships for the Indian brand (TVS). The results indicate that for the Indian brand (TVS), brand loyalty and brand performance positively affect the brand equity (Table 6). Brand uniqueness and brand imagery are found to have no spillover effect upon brand building. It is observed from Table 8 that though the inter-correlation between brand performance and brand imagery is positive (= 0.787, $p < 0.000$), the spillover effect of brand imagery on brand resonance is not significant.

Table 6: Spillover Effects of Branding Elements on Brand Equity of TVS

Hypothesis	Relationship	Standardized Coefficient	t-Value	p-Value
H_4	Brand Resonance ← Brand Loyalty	0.949	4.12	0.00
H_3	Brand Resonance ← Brand Performance	0.059	3.46	0.00
H_2	Brand Resonance ← Brand Imagery	-0.092	-0.78	> 0.05
H_1	Brand Resonance ← Brand Uniqueness	0.005	3.12	0.05

Table 7: Direct Effect n – TVS

	Brand Uniqueness	Brand Imagery	Brand Loyalty	Brand Performance
Brand Resonance	0.005	-0.067	1.105	0.040

Table 8: Correlation among Exogenous Constructs n – TVS

Exogenous Construct	Brand Uniqueness	Brand Imagery	Brand Performance	Brand Loyalty
Brand Uniqueness	1.00			
Brand Imagery	0.014	1.00		
Brand Performance	0.005	0.787**	1.00	
Brand Loyalty	0.285	0.050	0.059	1.00

Note: ** implies that the factor has significant spillover relationship supporting the hypothesis.

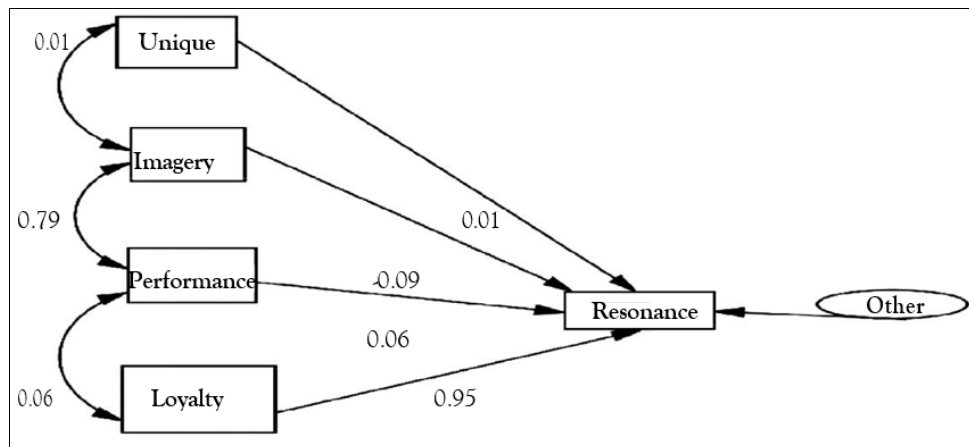


Fig 2: Relationships between Four Branding Elements and Brand resonance for TVS

Conclusion

The findings indicate spillover effect of different branding elements in developing the brand equity of a global and Indian brand of two-wheeler brands. For the global brand, Honda, brand uniqueness, brand performance and brand loyalty are found to have positive spillover effect on brand resonance (used to measure brand equity). Similarly, for the Indian brand, TVS, the spillover model indicates that brand loyalty and brand performance positively contribute towards its brand equity. However, no spillover relationship exists between brand imagery and brand resonance in case of both Honda and TVS.

These findings are in accordance with the results of a few earlier studies. It supports the findings of Tolba and Hassan (2009) that loyalty and satisfaction are the primary drivers of brand equity. It also supports the results of Tong and Hawley (2009) who stated that brand association and brand loyalty are the influential dimensions of brand equity. Thus, it is clear from the findings that for two-wheelers, brand loyalty is one of the most influencing dimensions of brand equity.

Limitations and Directions for Future Research

There are several limitations of this research. CBBE has been measured by different authors from different perspectives. This study concentrates on measuring CBBE based only on Keller's model. The proposed brand equity measure is only a relative measure. Further, the area of survey is limited and the model has been tested only for a few brands. This study does not consider service sector for measuring CBBE. The data is solely based on the answers of the respondents residing in Coimbatore. Moreover, the two-wheeler market in India is set for sustained growth over the long term. Again two-wheeler companies are also relying on aesthetics, design and more energy-efficient methods to satisfy the changing aspirations and lifestyle of the consumers. Hence, the future of two-wheelers is on the verge of evolving from a mere utilitarian product to a truly energy-efficient, well-connected, and value-added product. In further research, the model can be tested for other brands to observe the variations in the results.

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