

Evaluating Customer Based brand Equity: An empirical evidence of Indian e-commerce market

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Abstract - Purpose – This study is done to examine the practical utility of the customer-based brand equity model in the Indian ecommerce market.

Design/methodology/approach – This study employs a conclusive research design and SPSS is used to analyse the data secured through self-structured questionnaire for David Aaker's model of brand equity and to examine the causal relationships amongst the four elements of brand equity and overall brand equity in the Indian ecommerce industry.

Findings – The findings conclude that perceived quality and brand loyalty are influential dimensions of brand equity. Weak support was found for the brand association and brand awareness dimensions but their role in building brand equity cannot be overruled.

Practical implications – The paper depicts the importance of considering brand equity elements while brand managers and marketing planners of ecommerce companies make any marketing strategies .They must focus on the improving perceived quality as it is directly related to brand loyalty while taking care of brand associations and brand awareness.

Originality/value – This study contributes to the literature and body of knowledge for proving the applicability of consumer-based brand equity in the ecommerce industry in India.

Keywords: *Customer based brand equity, Indian e-commerce market, e-tailers , Brand association, Brand Awareness, Brand Loyalty, Perceived quality.*

I. INTRODUCTION

Indian e-commerce market is continuously expanding. The India Brand Equity Foundation (IBEF) is anticipating an enormous growth in the sector to the tune of US \$200 by 2026. It also predicts that India's internet economy is going to be US\$ 250 billion by 2020, in which a very important and pivotal role will be played by ecommerce companies (ibef.org). Though major e-tailers like Amazon, flip-kart , Paytm Mall , Shopclues, Bigbasket etc. are driving the growth of this industry and Government of India is taking various initiatives for propelling this industry but another aspect which is responsible and to be accepted for growth of this sector is customer's acceptance of e-commerce transactions in their day to day activities. So it becomes very important how the consumers are perceiving these e-commerce companies. Though the industry is growing, a startling fact that everybody has to accept is many companies in the sector are finding difficult to sustain. Companies have to create differential factors to sustain in the domain and one such factor which will decide the future of these companies is

their Brand Equity. Though various researchers tried to measure the brand equity for various brands in varied and different industries but only a few studies were conducted to measure the online e-commerce industries brand equity and furthermore, hardly any study was conducted in Indian context. So looking forward for filling this gap this paper is trying to measure the consumer based brand equity of major players of the Indian ecommerce market space.

II. REVIEW OF LITERATURE

Aaker (1991) opined that brand equity is “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 a firm and /or to that firm's customers. Aaker's (1996) classified its “brand equity ten” into five categories. The leading four categories show customers evaluation of brand equity for any brand based on the four dimensions (brand loyalty, perceived quality, brand associations and brand awareness), while the fifth category (proprietary assets) depends on two market behaviour measures and information about this category cannot be

collected from consumers. Keller (1993) described customer-based brand equity as “the differential effect of brand knowledge on consumer response to the marketing of the brand”. He further conceptualized brand knowledge through “associative network memory model” composed of two dimensions: brand awareness and brand associations in consumer memory. Positive customer-based brand equity ensues only when the customer is not only aware about the brand and but also clutches unique, favourable and strong brand association in memory. According to Keller (1993), customer-based brand equity can be measured through both an indirect and a direct approach. While indirect approach requires identifying potential sources of brand equity, the direct approach is pivoted around the consumer perceptions to diverse elements of the marketing strategies of the company. Kim (2004) implies that measures of customers’ brand perceptions and sensitivities are the precise reflections of performance of the brand in any market and a strong, positive customer-based brand equity has a noteworthy Influence on the financial health of the organization.

BRAND EQUITY AND ITS DIMENSIONS

Aaker (1991) posited the concept of Brand equity and Aaker and Joachimsthaler (2000) advocated that has four different dimensions like brand loyalty, brand awareness, brand associations and perceived quality.

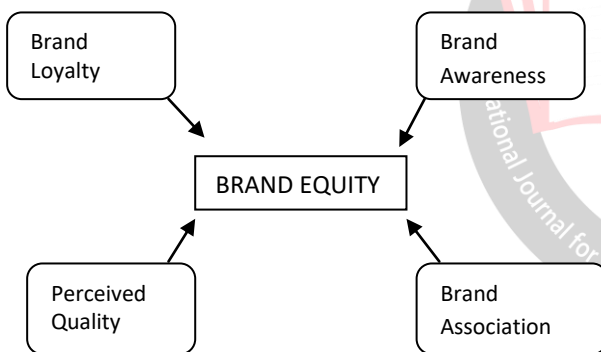


Figure1: Brand equity and its dimensions

Source: Aaker (1991)

A brand which is established has strong brand equity and this is the reason with which it creates a stronger associative network in the mind of the consumers. The power of a brand and the degree of its brand equity is related to the brand associations.

Consumer-based brand equity (CBBE) is defined as the value of a brand to the customer (Aaker, 1991; Keller, 1993). But most of the times it is perceived that brand equity denotes to the financial worth and monetary perspective accomplished by a brand.

Brands with strong consumer based brand equity always have advantages over all the brands that do not possess strong CBBE. Strong CBBE elicits a greater level of

confidence amongst consumers mind as compared to the competitor’s brand (Lassar et al., 1995; Yoo & Donthu, 2001). Consumer based brand equity is the outcome of the amplified brand strength, which is actually the resultant of the positive brand associations that consumers have in their mind (Bose, Roy, & Tiwari, 2016; Keller, 1993; Lassar et al., 1995). Brand associations can be anything and everything associated with the brand and are the attitudes a person holds toward a brand (Keller, 1993). These brand associations are crucial in gaining marketing success as these brand associations reflect the degree to which consumers have faith in brand and can meet customer’s functional or symbolic needs (Keller, 1993).

Kotler (1996) defines brand equity as “The value of a brand, based on the extent to which it has high brand loyalty, name awareness, perceived quality, strong brand associations, and other assets such as patents, trademarks, and channel relationships.”

BRAND LOYALTY

Brand loyalty has deep impact on brand equity. It is the major component of brand equity (Aaker, 1991). brand loyalty can be defined and measured from a behavioural perspective as the degree to which a buying unit, focuses on its buying over a period of time on a specific brand within a specific product category (Schoell and Guiltinan, 1990). Oliver (1997) discourses that as per attitudinal perspective brand loyalty is “the tendency to be loyal to a focal brand as demonstrated by the intention to buy it as a primary choice”. (Bowen and Shoemaker, 1998) proved that Loyal customers hardly switch to a competitor brand and go for frequent purchases as compared non-loyal customers. Chaudhuri & Holbrook (2001) posited that brand loyalty is directly proportional to price premium. Ovidiu (2005) discussed that Brand loyalty reduces marketing costs and helps in leveraging trade. Loyal customers advise other customers also to use the brand. So retaining existing customers is cheaper and easier and competitors has to invest heavy resources with plenty of time to entice satisfied and loyal customers. Hence, the first null hypothesis in context of measuring brand equity for ecommerce companies’ buyers is proposed as:

H₀₁: Brand loyalty has no significant positive impact on brand equity in ecommerce market.

PERCEIVED QUALITY

Aaker (1996) opined that perceived quality is an pivotal dimension of the CBBE framework. Zeithaml (1988) claimed that perceived quality is the customer’s perception about the overall quality or supremacy of the product as compared to the competitors offerings with respect to its intended purpose. It is perceptual in nature rather than actual. Bartikowski et al. (2010) posited that high perceived quality is useful both in short and long run

as it leads to increased profits by charging premium prices and market expansion and market share gains in short term and long-term respectively. Kotler (1991) connotes that there lies an intrinsic relationship among product and service quality, customer satisfaction, and company profitability. So the following null hypothesis is formulated for Perceived quality and Brand Equity:

H₀₂. Perceived quality has no significant direct effect on brand equity in ecommerce market.

BRAND AWARENESS

Aaker (1991) deciphered that a potential buyer's ability to recognize or recall a brand from a certain product category is Brand awareness. Keller (1993) postulated that brand awareness can be divided into two sub categories: brand recall and recognition. Brand recognition is the consumers' ability to realize that he had been exposed to the brand and the brand is different from the other offerings in the market. Brand recall signifies the ability of the consumers to appropriately generate the brand from memory, when a consumer needs to be fulfilled by certain product category. Aaker (1996) further suggested that while brand recall is applicable for well established brands, Brand recognition is to be used for new and niche brands. Thus the null hypothesis posited is as follows:

H₀₃. Brand awareness has a no significant effect on brand equity in ecommerce market.

BRAND ASSOCIATIONS

Aaker (1991) postulated that when a set of associations, are organized in some meaningful way it will lead to the formation of the brand image. Brand associations are the source of value creation for the firm and for its customers as well because it helps in processing/retrieving information, differentiating the brand, creating positive attitudes or feelings, providing a reason to buy, and thus providing a basis for brand extensions. Kotler and Keller (2006) opined that brand association means anything and everything which can be related and linked to a brand in memory of a customer.

Chen (2001) identified the brand associations types and observed the a subtle relationship amongst the characteristics of brand associations and brand equity and posited that brand association can take all forms and represents the features of the product or even the traits independent of the product itself. Brand association can be seen in all forms and echoes features of the product or aspects.

So based on the above discussion the null hypothesis posited for Brand Association is as follows:

H₀₄. Brand Association has a no significant effect on brand equity in ecommerce market.

It has already been discussed that from customers perceptions perspective CBBE (customer based brand equity) emerges from four dimensions namely Brand loyalty, Brand Awareness, perceived quality, Brand association. Hence main null hypothesis with respect to ecommerce industry is chosen as:

H₀₅. There is no significant impact of Brand loyalty, Brand Awareness, perceived quality, Brand association on Brand equity creation in ecommerce market.

III. OBJECTIVES OF THE STUDY

1. To comprehend the impact of dimensions of brand equity on brand Equity in Indian ecommerce market.
2. To appraise the most influencing brand equity dimension in Indian ecommerce market.

IV. RESEARCH METHODOLOGY

RESEARCH DESIGN, INSTRUMENT, SAMPLE SIZE & SAMPLING METHOD USED

This conclusive research framework was designed to test the above mentioned hypothesized relationships in the Indian ecommerce industry. This study utilizes descriptive and causal research design and is a cross-sectional study. It has got five constructs in place namely 1. Brand Equity 2. brand loyalty 3. Brand awareness 4. Brand associations and 5. Perceived quality. These constructs were further categorized into twenty eight indicators.

For this study a self-structured questionnaire was designed and administered to 350 respondents. Out of which only 310 were found suitable for the analysis. A simple random technique was used for sampling purpose. Respondents' responses were captured and estimated by applying the 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). Three questions about demographic attributes were estimated by closed-ended questions. One question capturing the preference given to the major e-commerce companies was also asked on the nominal scale.

DATA ANALYSIS

Analysis of the data was done using Statistical package for social science (SPSS). Reliability of the items on the scale was measured using cronbach alpha whose value stood 0.877 which is the testimony that the scale was very dependable.

After analysis of the demographic variables it is clearly visible that out of total 310 respondents 56.5 percent were males and 43.5 percent were females.

First of all descriptive analysis was carried out in terms of age of the respondents wherein it was found that out of total 310 respondents 16.5 percent were in 10 to 20 years age group, 58.1 percent were in 21 to 30 years age group, 21.3 percent respondents were in 31 to 40 years age group, 2.3 percent were in 41 to 50 years age group and only 1.9

percent of the total respondents were above 50 years age group.

Table1: Demographic profile of respondents

Respondents	Frequency	Percent
GENDER		
Male	175	56.5
Female	135	43.5
AGE (IN YEARS)		
10-20	51	16.5
21-30	180	58.1
31-40	66	21.3
41-50	7	2.3
Above 50	6	1.9
EDUCATION		
UG	142	45.8
PG	124	40.0
Doctorates	36	11.6
Others	8	2.6

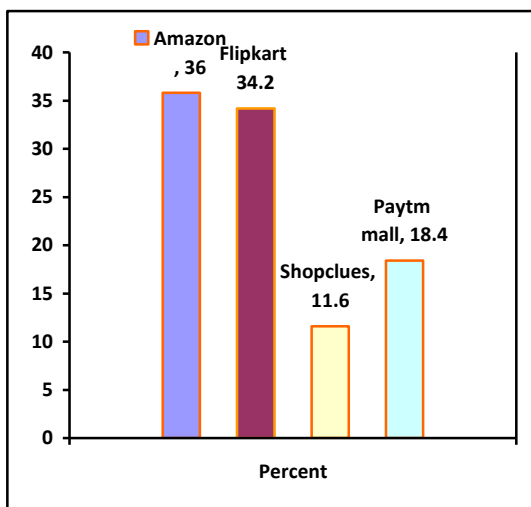
Education level wise out of 310 respondents 45.8 percent were UG level,40 percent were holding PG level education and 11.6 percent of the respondents were Doctorates and remaining 2.6 percent of respondents hold other educational qualification.

Table2: Preferred E-commerce brand

E-commerce brand	Frequency	Percent
Amazon	111	35.8
Flipkart	106	34.2
Shopclues	36	11.6
Paytm mall	57	18.4

After analysing the data about four major brands in Indian e-commerce sphere it is clearly visible that most of the respondent's preferred brand Amazon followed by Flipkart. Paytm Mall is third preferred brand and the fourth major brand is Shopclues.

Fig-2: Preferred E-commerce brand



Out of total 310 respondents almost 36 percent respondents preferred Amazon followed by 34.2 percent

respondents liking flipkart .Paytm Mall is preferred by 18.4 percent respondents while fourth major brand Shopclues is liked by 11.6 percent respondents.

V. RESULT AND INTERPRETATION

For ascertaining the reliability of the items cronbach alpha was used whose value found out as 0.877 which is the evidence that the scale was very dependable.

Preliminary analyses were performed to ensure there was no violation of the assumptions of normality. To analyse the statistical data, normality of the data is to be assessed using Shapiro-wilk normality test. Here the p value was found out 0.436 which was more than 0.05. So data fulfils the requirement of normality. Table 3 shows the Pearson Correlation amongst all the variables was evaluated for understanding the correlation and the direction of their relationship.

Table 3: Correlations among various Independent variables

Variables		Brand awareness overall	Brand association overall	Perceived quality overall	Brand loyalty overall
Brand awareness overall	Pearson Correlation	1			
Brand associations overall	Pearson Correlation	.597**	1		
Perceived quality overall	Pearson Correlation	.349**	.689**	1	
Brand loyalty overall	Pearson Correlation	.331**	.735**	.903**	1

** . Correlation is significant at the 0.01 level (2-tailed).

From the correlation table it is well evident that all the dimensions of brand equity are correlated positively with each other. It is to be noted that there was a positive correlation between the overall Perceived quality and overall brand loyalty , $r = .903, p \leq .001$, with a $R^2 = .815$.

To predict the impact of brand loyalty on brand equity was tested the null hypothesis 1 (ie. H_{01} : Brand loyalty has no significant positive impact on brand equity in ecommerce market) using general linear regression.

A simple linear regression was calculated to predict overall brand equity based on the overall Brand loyalty. A significant regression equation was found ($F(1,308) = 97.535, p < .001$), with an R^2 of .489. Participants' predicted overall Brand equity for the brand is equal to $3.315 + .340$ (overall Brand loyalty). So there is a change of .34 units in overall brand equity with a unit change in overall Brand loyalty. Hence H_{01} is rejected and it is proven that Brand loyalty has significant positive direct impact on brand equity in ecommerce market

To predict the impact of perceived quality on brand equity was tested the null hypothesis 2 (H_{02} . perceived quality has a no significant effect on brand equity in ecommerce market) using general linear regression. A simple linear regression was calculated to predict brand equity based on the perceived quality. A significant regression equation was found ($F(1,308)= 202.509$, $p < .001$), with an R^2 of .530. Participants' predicted Brand equity for the brand is equal to $2.680 +.441$ (perceived quality). So there is a change of .441 units in brand equity with a unit change in perceived quality. Hence H_{02} is rejected and it is proven that perceived quality has significant positive direct impact on brand equity in ecommerce market

To predict the impact of brand awareness on brand equity was tested the null hypothesis 3 (H_{03} . Brand awareness has a no significant effect on brand equity in ecommerce market) using general linear regression. So a simple linear regression was calculated to predict brand equity based on the brand awareness. A significant regression equation was found ($F(1,308)= 151.052$, $p < .001$), with an R^2 of .619. Participants' predicted Brand equity for the brand is equal to $2.016 +.577$ (Brand awareness). So there is a change of .577 units in brand equity with a unit change in brand awareness. Hence H_{03} is rejected and it is proven that brand awareness has significant positive direct impact on brand equity in ecommerce market.

To predict the impact of brand association on brand equity was tested the null hypothesis 4 (H_{04} . Brand association has a no significant effect on brand equity in ecommerce market) using general linear regression. A simple linear regression was calculated to predict brand equity based on their brand association of the participants. A significant regression equation was found ($F(1,308) = 160.233$, $p < .001$), with an R^2 of .619. Predicted Brand equity for the brand is equal to $2.050 +.574$ (brand association). So there is a change of .574 units in brand equity with a unit change in brand association. Hence H_{04} is rejected and it is proven that Brand association has significant positive direct impact on brand equity in ecommerce market

To predict the impact of overall brand loyalty, overall brand awareness, overall brand association and overall perceived quality on overall brand equity was tested the null hypothesis H_{05} . There is no significant impact of Brand loyalty, Brand Awareness, perceived quality, Brand association on Brand equity creation in ecommerce market

Multiple linear regression was calculated to predict overall brand equity based on their overall brand loyalty, overall brand awareness, overall brand association and overall perceived quality. A significant regression equation was found ($F(4, 305) = 108.651$, $p < .000$), with an R^2 of 0.588. Predicted brand equity is equal to $1.233 +.387$ (overall brand loyalty) + $.344$ (overall brand awareness) + $.172$ (overall brand association) + $.626$ (overall perceived quality).

VI. CONCLUSION

Building strong brand equity is very decisive for the ecommerce companies especially in the India market situations due to heavy investments and high risks in the sphere. Since there are a few well known ecommerce brands, competition is day by day scaling to the next level.

FINDINGS

The basic motive of this piece of work was to examine and retest the applicability and utility of David Aaker's brand equity model which remains the most common conceptual framework for the measuring of customer-based brand equity. Though a lot many years had passed when he propounded this model but this study proves that even today his model for brand equity is standing tall. The findings of the study completely support all the Aaker's brand dimensions. It is clearly evident that Customers give maximum weightage to the perceived quality while choosing ecommerce companies for the purchase of products. Again brand loyalty remains very important dimension for the customers. From Table 3 it had been clearly proved that both perceived quality and brand loyalty are positively correlated with each other. So more is the perceived quality higher is the probability that customers become loyal to the brand. Here in this study also Brand loyalty had demonstrated the second strongest impact, and hence indicating the indispensable role of brand loyalty in developing brand equity in the Indian e-commerce sphere.

Also brand association, brand awareness, perceived quality and brand loyalty had shown positive correlation with each other and hence had shown positive influence over brand equity of Indian e-commerce companies operating in this sphere.

MANAGERIAL IMPLICATIONS

From the above discussion two managerial implications could be derived. The first implication is that Brand managers should concentrate their energies and focus primarily on perceived quality and brand loyalty which actually had displayed high standing in the construct of brand equity. In this cutthroat competitive Indian ecommerce industry, the key to win the customers heart and mind battle is to provide high quality in terms of products and services and supply chain and logistics and this creates a unique, encouraging, and strong brand association to provide customers with a reason to buy from the ecommerce brand, then manager have to work to retain their loyalty and gain their repeat business (Tepeci, 1999; Aaker, 1991).

As the second implication, marketing/brand managers must concentrate on the interrelationship amongst all the four dimensions of brand equity, especially the relationship between perceived quality that leads to brand association and finally to brand loyalty. But the role of brand awareness and its relationship to brand association

and brand loyalty must not be underestimated. It serves as a basic building block for brand image and hence for creation of brand loyalty and above all perceived high quality ensures that customers recognize an e-commerce brand's uniqueness and superiority and hence will pave way to consumer delight and loyalty (Oliver, 1997; Aaker, 1991).

SUGGESTIONS & RECOMMENDATIONS

So ultimately it is suggested that while focussing and carrying out researches on creating perceived quality and brand loyalty, managers and academicians should consider the effects of brand association and brand awareness also. These all dimensions put together will lead to strong brand equity even in case of Indian e-commerce brands.

Also assessment instruments for academic studies or large-scale use must clearly pay attention to all the four dimensions of brand equity (perceived quality, brand loyalty, brand association and brand awareness) and their coordination.

LIMITATIONS

This study has two major limitations. Firstly, it is limited to only a few hundreds of respondents due to the constraints of time, resources and money. Future research can be conducted on the large scale to understand the bigger picture of overall attitudes and behaviours of Indian consumers. Second major limitation is that it could measure CBBE only FROM consumer's perspective while the financial perspective and the performance of the company could be other facet of brand equity. Future researches may work on finding out the CBBE from financial and company's perspective.

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