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The impact of customer-based brand equity on the operational performance of FMCG companies in India

Bijuna C. Mohan *, A.H. Sequeira

School of Management, National Institute of Technology Karnataka, Surathkal, Mangalore, Karnataka 575025, India

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Abstract Measurement of brand equity has posed a big challenge to the companies in the Indian fast moving consumer goods (FMCG) industry. This paper investigates the impact of brand equity on the operational performance of businesses in the Indian FMCG industry. The research study adopts descriptive and exploratory approaches. The results indicate that there is correlation between brand equity and operational performance of business. The practical implications of the findings are that brand equity has to be effectively managed for improved operational performance of business.

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Introduction

One of the most popular and potentially important marketing concepts that has been extensively discussed by both academicians and practitioners over the past decade is brand equity. It has become essential for brand managers to understand and measure brand equity (Ambler, 2003). However, it is not sufficient just to develop and measure brand equity. Companies have to substantiate the amount spent in managing their brands through their business performance. To the best of our knowledge, research studies in this area have been inadequate.

Despite considerable interest in the concept of customer-based brand equity, there have been few attempts at its measurement in the fast moving consumer goods (FMCG) industry. The FMCG industry is the fourth largest sector in the Indian economy. The findings of this study will not only enrich the field of research pertaining to the use of brand equity for leveraging business performance, but also help brand managers of FMCG companies to manage their brands effectively and efficiently. Multinational companies (MNCs) have a strong presence in the Indian FMCG sector. There is intense competition between and within the organised and unorganised segments of the FMCG sector, and the companies survive on low operational cost (IBEF, 2006).

This gap, in our understanding, provides justification for a study to explore the relationship between brand equity and operational performance in the FMCG industry.

The main purpose of the study is to determine the possible association between brand equity (based on customers' assessments) and operational business performance. The

* Corresponding author. Tel.: +91 9448503838; fax: +91-824-2474033.

E-mail address: bijunacm@gmail.com (B.C. Mohan).

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practical implications of this research can be beneficial to managers in organisations to leverage brand equity to improve operational performance of their businesses.

Literature review

Customer-based brand equity

Some researchers with the consumer or marketing perspective refer to brand equity as customer-based brand equity. Subscribers to this approach tend to focus on the value created by marketing activities as perceived by customers (Mackay, Romaniuk, & Sharp, 1997). (In this paper, the term brand equity is used to denote customer-based brand equity.) Brand equity, when correctly and objectively measured, is the appropriate metric for evaluating the long run impact of marketing decisions (Simon & Sullivan, 1993). The power of the brand lies in what customers have learned, felt, seen, and heard about the brand as a result of their experiences over time (Keller, 2003).

The concept of brand equity can be operationalised from two angles: from the angle of consumer perceptions (cognitive approach) and that involving consumer behaviour (behavioural approach) (Silverman, Sprout, & Pascal, 1998). The consumer perceptions approach includes brand awareness, brand associations and perceived quality. The consumer behaviour approach includes brand loyalty and the focus on paying a price differential (Myers, 2003). Aaker (1991) considers brand equity as “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 to a firm and/or to that firm’s customers” (p. 15). The brand assets/liabilities are grouped into five categories: brand loyalty, brand name awareness, perceived brand quality, brand associations, and other proprietary brand assets. Other proprietary brand assets include patents, trademarks, and channel relationships. According to Yoo and Donthu (2001), the fifth category, other proprietary brand assets, is not relevant to consumer perception, and hence, only the first four dimensions should be regarded as relevant to brand equity. Focusing on the various dimensions of brand equity, this study recognises brand loyalty, brand awareness, perceived quality, and brand associations as the common dimensions of brand equity. We consider behaviour to be a consequence of brand equity rather than brand equity itself.

The growing number of brands in international markets necessitates the development of valid and reliable brand equity measures that can be generalised across different countries (Buil, de Chernatony, & Martínez, 2008). Reliable assessment of cross-national measures is of fundamental interest to international companies since these measures influence the precision and quality of strategic decisions (Parameswaran & Yaprak, 1987).

Operational business performance

According to Eccles (1991), there has been a revolution in performance measurement, urging organisations to place emphasis on non-financial performance measures. For many years, commentators have exhorted organisations to use more balanced measurement practices in an attempt to complement the traditional financial performance measurement. There are compelling reasons for viewing business performance in terms broader than business economic performance (Venkatraman & Ramanujam, 1987). The present study is based on the conceptualisation of operational performance by Venkatraman and Ramanujam (1986), where, the operational performance of the FMCG companies is measured by the market share. However, financial measures of performance alone cannot guide an organisation to market dominance. Non-financial performance indicators also have to be measured and improved (Kaplan & Norton, 1996).

Indian FMCG industry

Fast moving consumer goods are also known as consumer packaged goods (CPG). The range of FMCG products is classified into three broad categories: household care, food and beverages, and personal care products. The products under each of these categories are provided in Table 1.

Fast moving consumer goods are products that have a quick turnover and a relatively low cost; FMCG products usually get replaced within a year, and they constitute a major part of the consumers’ budget in many countries. Marketing of FMCGs plays a pivotal role in the growth and development of a country irrespective of the size and population. Further, the development of FMCG marketing has always kept pace with the economic growth of the country (Sarangapani & Mamatha, 2008). The FMCG sector primarily operates on low margins, and there-

Table 1 FMCG category and products.

Category	Products
Household care	Fabric wash (laundry soaps and synthetic detergents); household cleaners (dish/utensil cleaners, floor cleaners, toilet cleaners, air fresheners, insecticides and mosquito repellents, metal polish and furniture polish)
Food and beverages	Health beverages; soft drinks; staples/cereals; bakery products (biscuits, bread, cakes); snack food; chocolates; ice cream; tea; coffee; processed fruits, vegetables; dairy products; bottled water; branded flour; branded rice; branded sugar; juices.
Personal care	Oral care, hair care, skin care, personal wash (soaps); cosmetics and toiletries; deodorants; perfumes; feminine hygiene; paper products.

Source: IBEF 2006.

fore, success very much depends on the volume of sales (Sarangapani & Mamatha, 2008).

Brand equity and operational performance

Companies invest many of resources in building and maintaining their brands. Companies must therefore manage by metrics and balance short and long-term perspectives and performance. In the opinion of some researchers, by 2020, branding will become the most significant value driver for boardrooms (Roll, 2009). Brand equity is an evolving concept. Companies need to understand how brand equity can be leveraged to enhance operational business performance.

Baldauf, Cravens, and Binder (2003) found brand equity components brand awareness, perceived quality, and brand loyalty to be positively related to brand profitability performance and brand market performance. Webster (2000) and Mohan and Sequeira (2012) provided conceptual support for the relationship between brand equity dimensions and brand market performance. Tolba and Hassan (2009) concluded that brand equity constructs are correlated with brand market performance.

Considering the relevance of brands in the strategic marketing theory explanations of firm performance, and the significant amount of resources that firms spend on brand building, acquisition, and management (Morgan & Rego, 2009), the study on relationship between brand equity and performance will address an important gap in marketing knowledge.

Objectives of the study

The objectives of this study are:

1. To identify the various components of brand equity of FMCG companies.
2. To assess the influence of brand equity on the operational performance of FMCG companies.

Methodology

Research design

The study uses a combination of descriptive and exploratory methods. The descriptive approach covered the description of phenomena or characteristics associated with FMCG consumers, a description of the subject population, and the discovery of associations between brand equity and its variables. The goal of the descriptive study was to evaluate the different brand equity dimensions of awareness, loyalty, perception of quality and associations with respect to different FMCG brands.

The main objective of exploratory research is to explore a problem in order to provide more insights and understanding about the specified problem. This study adopted the exploratory research method to analyse the secondary data in a qualitative way. The research used document analysis, under qualitative study, where contemporary confidential reports, public reports, government documents, and opinions were evaluated to study the performance of different FMCG companies. The exploratory study helped in crystallising the

search problem, conceptualising the framework of the study and operationalising the dependent and independent variables.

Data

Secondary data for this research were collected on operational business performance of six brands belonging to four companies. The data were collected on different brands of toilet soap, fabric wash, and tea from market leaders of FMCG brands.

The primary data for the study related to the variables identified for investigation in the research. In this research, the attitude and opinions of people towards brands were measured. A survey design was used for the research, which provided a quantitative description of trends, attitudes, and opinions of the FMCG consumers. Data collection from the respondents was so designed as to enable the findings to be generalised to the population (Pinsonneault & Kraemer, 1993).

Research tool

Respondents were administered with a questionnaire consisting of items related to their behaviour, intentions, attitudes, awareness, motivations, and demographic characteristics. On the basis of the items used in the literature and the definition established in the study, a pool of measures was generated. Three product categories were chosen where two brands were evaluated within each category of FMCG products. The product categories were: personal wash, fabric wash, and packaged tea.

The questionnaire contained two parts. Part I included demographic information related to gender, age, education, marital status, profession, income, and place of residence. Part II consisted of questions specific to different product categories and brands. The data were captured through items of the ordinal scale, which is one of the comparative scales. Questions in Part II were multiple-choice questions and related to brand equity.

Scale development

Based on the literature review, four dimensions of brand equity were considered for scale development. Five items were designed to measure brand awareness. Aided and unaided recall were the two measures used to measure brand awareness (Aaker, 1991). Six items measured brand loyalty, and four items measured perceived quality. The six-item scale for brand loyalty was adapted from measures developed by Aaker (1996), Odin, Odin, and Vallette-Florence (2001), Yoo and Donthu (2001) and Beatty and Kahle (1988). The four items of perceived quality were derived from Dodds, Monroe, and Grewal (1991). The dimension of brand association included perceived value, brand personality, and organisational association. In total, ten items were used to measure brand association.

Four brand equity items were designed to capture the overall brand equity. All the four measures of overall brand equity were adapted from Yoo, Donthu, and Lee (2000). The dimensions were measured using a 5 point Likert scale anchored from 1 (*strongly disagree*) to 5 (*strongly agree*).

Sampling design

The study required sampling from two aspects: first, a sample of brands (stimuli) to be selected from the entire set of FMCG brands, and second, a sample of FMCG consumers. Precaution was taken to avoid any sampling and non-sampling errors.

The stimuli were selected from each of the three categories of the FMCG industry. In order to meet the criteria of maturity of the industry and differences required by different product categories as stated by Kirmani and Zeithaml (1993), this research used judgment sampling technique under non-probability sampling to draw the FMCG products and brands. The products with highest penetration in each category were selected using judgment sampling. Fabric wash, personal wash (toilet soap), and tea are high penetration categories. Two brands were identified for each of the three products. The brands of the market leaders and those of their competitors were considered for the study. The customer-based brand equity of these six brands was evaluated.

The sampling of FMCG consumers was undertaken in two stages. Initially, the states from which the FMCG consumers were to be drawn were selected. In the next stage, respondents were selected from these states. This research used a combination of probability sampling (proportionate stratified sampling) and non-probability sampling (convenience sampling) methods.

The total sample size required for the study was 820 which was calculated using the standard formula. From the three strata identified based on the FMCG spend, sample states were drawn randomly. From the low strata, Madhya Pradesh and West Bengal were selected. From the medium strata, Gujarat, and from the high strata, Karnataka and Punjab were selected. Further, to select the sample respondents from these states, convenience sampling under non-probability sampling was used.

Results

The results of the study, and the validity and reliability of scales used, are detailed in the following section.

Validity and reliability of scales

In order to test the reliability of the overall brand equity scale and each of the brand equity dimensions, Cronbach's alpha was calculated. The alpha meets the recommended levels of 0.70 for all the measures (Nunnally, 1978) (Table 2).

The Cronbach's alpha coefficient for brand equity dimensions indicated good internal consistency and reliability among the items within each dimension. The construct validity of the instrument is justified because the measures were developed from a theoretical framework that was derived from an extensive literature review.

Descriptive statistics providing information regarding mean and standard deviation for brand equity variables for the FMCG products show that there is no strong response bias for any of the variables. The degree of variation was not very high for the three different types of FMCG products—toilet soap, fabric wash, and tea—considered for the study. The study was also spread across five different states of India. In terms of the mean scores, the "brand recognition" dimension had the

Table 2 Reliability of brand equity variables.

Dimensions	Cronbach's alpha
Brand awareness	0.754
Brand loyalty	0.933
Perceived quality	0.862
Brand association	0.911
Perceived value	0.816
Brand personality	0.792
Organisational association	0.879
Overall brand equity	0.902

Source: Survey results.

Table 3 Descriptive statistics of brand equity dimensions and overall brand equity.

Variables	Mean	Std. deviation
Brand awareness	7.5327	1.44877
Brand loyalty	19.9419	5.24170
Perceived quality	13.8668	2.70742
Brand association	34.6416	6.22604
Overall brand equity	13.2252	3.16690

Source: Survey results.

highest mean score (3.79), while the "not buy other brands" had the lowest mean score (3.10).

Descriptive statistics providing information regarding mean and standard deviation for each of the brand equity components brand awareness, brand loyalty, perceived quality, and brand association, and overall brand equity for the FMCG products are provided in Table 3.

Relationship between brand equity and its dimensions

Pearson's product moment correlation coefficient (r) was calculated to identify the relationship, direction, and strength of the relationship between brand equity and its dimensions. Correlation analysis indicated the significant relationship between overall brand equity and brand equity dimensions (Table 4).

High, significant, and positive correlation was found between brand loyalty ($r = 0.717$, $p < 0.001$) and overall brand equity in the FMCG industry. Hence, there is a relationship between brand loyalty and brand equity in the FMCG industry. Brand loyalty is the deeply held commitment to repurchase an FMCG consistently in the future. This commitment has a significant influence on the brand equity. The results confirm that when people repurchase the same FMCG brand without switching to another brand, the equity of the FMCG brand improves. Brand loyalty was considered one of the most important determinants of brand equity (Aaker, 1991; Yoo et al., 2000). The result is also in tandem with the findings of Atilgan et al. (2005), where the study was conducted in the service industry. The result supports the research findings that there is a relationship between brand loyalty and brand equity in the FMCG industry in India.

Table 4 Pearson correlation matrix of brand equity dimensions.

Brand equity and dimensions		Brand awareness	Brand loyalty	Perceived quality	Brand association
Overall brand equity	r	0.407	0.717	0.704	0.750
	p	0.000	0.000	0.000	0.000

Source: Survey results.

Note: r—Pearson correlation coefficient; p is level of significance $p < 0.001$.

Significantly high correlation was also found between perceived quality ($r = 0.704$, $p < 0.001$) and overall brand equity. Perceived quality has a significant positive effect on brand equity in the FMCG industry in India. As perceived quality reduces perceived risk, this was an important dimension especially for services. Surprisingly, the correlation coefficient revealed that perceived quality is an important dimension in the brand equity of FMCG companies as well. The concept of perceived risk was not considered to be very relevant in FMCGs. But it was found that the consumer had to perceive quality in the product in order to purchase FMCGs. The relevance of perceived quality was consistent with the reason demonstrated by the consumers for purchasing the FMCGs.

Moderate correlation was found between brand awareness ($r = 0.407$, $p < 0.001$) and overall brand equity leading to the finding that there is a relationship between brand awareness and brand equity in the FMCG industry in India. The correlation coefficient indicates that the influence of brand awareness on brand equity was low concluding that success in the Indian FMCG market cannot be assured through brand name alone. The findings are contrary to the studies of Yoo et al. (2000) and Yoo and Donthu (2001), where the findings did not detect any direct effect of brand awareness on brand equity. The results point out that brand recognition is important for new brands, and recall and top-of-mind are more sensitive and meaningful for well-known brands. But this alone cannot lead to high brand equity.

Brand association ($r = 0.750$, $p < 0.001$) also was highly and significantly correlated with overall brand equity confirming that there is a significant relationship between brand association and brand equity in the FMCG industry in India. The findings justify Keller's (1993) statement that "customer-based brand equity occurs when the consumer is aware of the brand and holds some favorable, strong, and unique brand associations in memory" (p. 2). The associations form the starting point of the consumer's impressions and opinions of a brand and for the choices consumers make about buying and using different brands (Keller 2001). This justifies the strongest influence of brand association on the overall brand equity.

Hence brand loyalty, perceived quality, brand awareness, and brand association are the dimensions of brand equity for the FMCG industry in India. The correlation ranked highest for brand association, second for brand loyalty, third for perceived quality, and fourth for brand awareness. The results supported the proposed four-factor model. The study contributes to our understanding of brand equity measurement by examining the dimensionality of this construct. The principal contribution of our findings is that they provide empirical evidence of the multidimensionality of brand equity, supporting Aaker's (1991) conceptualisation of brand equity.

Table 5 Model summary.

Model	R	R square	Adjusted R square	Std. error of estimate
1	.802 ^a	.643	.641	1.89784

^aPredictors: (constant), brand association, brand awareness, brand loyalty, perceived quality. Source: Survey results.

Multiple regression analysis

Multiple regression analysis was used to analyse the relationship between a single dependent variable, overall brand equity, and independent variables—brand awareness, brand loyalty, perceived quality, and brand association. As shown in Table 5, the model is highly significant, and brand awareness, brand loyalty, perceived quality, and brand association together explained 64.3 percent of the total variation in overall brand equity indicating a good model fit.

All the four independent variables—brand awareness, brand loyalty, perceived quality, and brand association—account for unique variance in the dependent variable, brand equity. Also, the standardised regression coefficients indicate significant relationships between overall brand equity and its dimensions. Brand association with largest standardised beta, i.e. 0.476, emerged as the variable which has the most statistically significant influence on overall brand equity (Table 6). This was followed by brand loyalty at 0.339, which is still statistically significant though the effect on overall brand equity is less strong. This is then followed by perceived quality at 0.129. The standardised beta (0.118) was the smallest for brand awareness. This could indicate that consumers select FMCG brands not just based on their awareness about the brand but also on other factors such as quality, availability, value for money, and so on. The results indicate that the impact of different brand equity dimensions vary in strength and thus offer ample opportunities for improving brand equity and, thereby, performance.

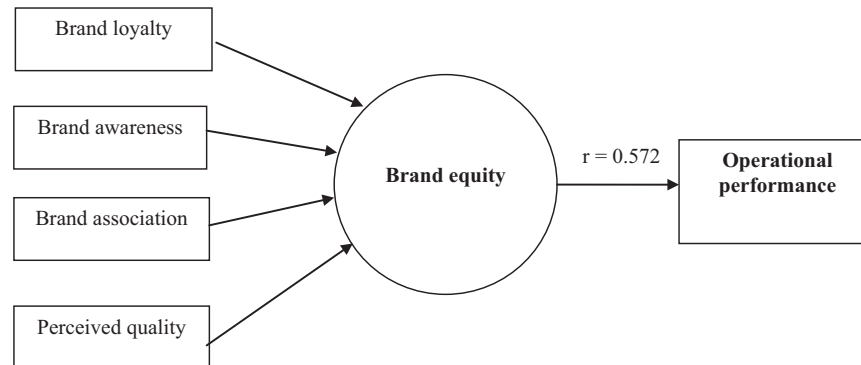
The results provide an understanding of how brand equity dimensions are related to brand equity, and which elements of brand equity structures are most closely associated with improving the brand equity of the FMCG brand. Companies have to focus on building associations with the brand to increase its brand equity. Further, companies have to focus on improving loyalty to the FMCG brand to improve its equity. Quality of the product should be the next target to fight competition. In order to perceive the product to be a quality product, focus should be on developing high quality products consistently, especially compared to competitors'

Table 6 Beta coefficients of brand equity dimensions.

Model	Unstandardised coefficients		Standardised coefficients	t	Sig.	Collinearity statistics	
	B	Std. error	Beta			Tolerance	VIF
1 (Constant)	.602	.407		1.481	.139		
Brand awareness	.091	.059	.118	2.393	.000	.605	1.654
Brand loyalty	.205	.020	.339	10.374	.000	.409	2.446
Perceived quality	.151	.048	.129	3.154	.002	.260	3.850
Brand association	.242	.020	.476	12.246	.000	.288	3.474

VIF: variance inflation factors.

Dependent variable: Overall brand equity. Source: Survey results.



Note: r = Pearson correlation coefficient

Source: Survey Results

Figure 1 Measurement model of brand equity and operational performance. Note: r = Pearson correlation coefficient. Source: Survey results.

products. Quality should also be reflected in the appearance of the product. Concentrating on building brand awareness alone for FMCG products does not drive brand equity nor business performance. Brand managers should consider the order and relationships that exist between the components and, specifically, should not underrate the influence of brand awareness on overall equity.

Brand equity dimensions had 64.3 percent influence in enabling FMCG companies attain brand equity. For a brand to have value, the customer must value it. The source of brand equity is customer perception (Keller, 1993); hence, it is important for managers to measure and track brand equity at the customer level (Lassar et al. 1995). The influence of the four dimensions in generating brand equity for the FMCG brands is in line with Keller (2003) who said that the power of the brand lies in what customers have learned, felt, seen, and heard about the brand as a result of their experience over time. This study establishes the multidimensionality of customer-based brand equity consistent with Aaker's (1991) conceptualisation. The large extent of variance contributed by the four dimensions to the overall brand equity leads us to conclude that the four important sources of brand equity are (1) the ability of a potential buyer to recognise or recall a brand (brand awareness); (2) the attachment that a customer has to a brand (brand loyalty); (3) the customer's perception of the overall quality of the product relative to alternatives (perceived

quality); and (4) the associations "linked" in memory to a brand (brand associations).

Relationship between brand equity and operational performance

For the FMCG industry in India, brand equity was found to be significantly correlated with operational performance of the business ($r = 0.572$, $p < 0.049$) (Fig. 1). Brand equity explained 32.7 percent of the total variation in the operational performance for the FMCG companies. It is apparent from the results that there are factors other than brand equity that influence the operational performance. Brand equity is an important predictor of operational performance, but other factors might also impact performance.

In order to further confirm the influence of brand equity on operational performance, box plot and Independent Samples t-Test was undertaken, wherein the brand equity of the different FMCG brands was compared. The results revealed higher brand equity for FMCG brands (in the case of toilet soap, $t = 2.511$, $p < 0.01$, for fabric wash, $t = 2.628$, $p < 0.01$, and for tea, $t = 5.051$, $p < 0.001$) with higher operational performance.

This study provides a clearer understanding of brand equity that has a significant direct positive influence on the operational performance. The results indicate that FMCG

companies with greater brand equity will achieve higher operational business performance.

Conclusions

The results of the present study lead us to confirm the strong influence of brand association, brand loyalty, and perceived quality on overall brand equity, and provide strong support for the value of research on brand equity in the FMCG industry. A high proportion of variance on overall brand equity was predicted by the brand association, brand loyalty and perceived quality dimensions. The implications of this study are that it is important for managers to measure the brand association, brand loyalty, and perceived quality of FMCG brands, and further build them with the development of appropriate marketing strategies, if brand equity is to be built.

This research also explored the relationship between brand equity and specific non-financial performance measure (operational performance) of business. The impact of a brand's equity on the operational performance (market share) is substantial. The brands with higher levels of brand equity yielded substantially greater market share. The evidence that the brand equity dimensions impact differently on brand equity may help marketers allocate resources more effectively. The results from the study provide important insights for brand managers to justify the resources spent on building brand equity. Further, the study also provides some insight on the appropriateness of the brand equity model in explaining future operational performance.

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