

MEASURING BRAND EQUITY OF COSMECEUTICALS – A CASE USING CONSUMER BASED BRAND EQUITY MODEL

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ABSTRACT

Objective: This study intends to operationalize brand equity and form a standard measure of it that could be used across cosmeceutical products to measure brand equity. It attempts to provide an indication of a set of items that can contribute to brand equity.

Methods: A survey instrument containing the said brand equity concept was administered to a sample pool of 200 select beauticians and consumers of a leading Indian Cosmeceutical brand identified using stratified random sampling method, from among the universe of the users of the product in Tiruchirappalli district, Tamil Nadu.

Results: The results obtained confirm that the dimensions, viz., brand awareness, perceived quality, brand loyalty, brand association, and brand image were found to significantly contribute to brand equity in cosmeceutical products. The regression confirms that perceived quality and brand associations are not causal drivers but are only indirect drivers of brand equity. Further, the dimension perceived quality was very strongly related with both brand loyalty and brand image, and brand loyalty was very strongly related with brand association among the beauticians segment of the sample. In the case of the brand equity dimensions among consumers, the brand association was very strongly related with brand awareness, perceived quality, and perceived quality was very strongly associated with the brand image.

Conclusion: The outcomes of the study confirm that cognitive components of perceived quality and brand association were less contributing to brand equity and the affective component of brand loyalty had stronger underpinning on brand equity construction and hence play an important role in brand management. The brand equity structure gives a very good clarification of brand equity drivers and also their relationships, to formulate a cause and effect model. The model can form a basis for more action-based tactical and operational marketing strategies.

Keywords: Brand equity, Customer based approach, Brand equity dimensions, Cosmeceutical brand equity.

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INTRODUCTION

For brand equity to provide strategic inputs and aid marketing decisions, it is important to recognize its underlying drivers and their consequences [1]. A five-dimensional scale to capture brand equity consisting of brand loyalty, perceived quality, brand awareness, brand image, and brand association was developed based on the conceptualization of brand equity dimensions by Keller *et al.*, Aaker [2-5]. Cosmeceuticals are cosmetic products that contain therapeutic/medicinal benefits. These products are purchased over the counter without a doctor's prescription. Cosmeceuticals were discovered as a result of convergence involving personal care and pharmaceutical products. The development of technological innovations and the emergence of new ingredients can be held to have spurred the expansion of this market. Cosmeceuticals market has been witnessing significant growth in the Global Personal Care Industry. Thus, the global cosmeceutical market is expected to grow at a CAGR of 9% during 2015-2020 [6].

In the context of the economies of principal growth markets now starting to compose down, there is mounting pressure on cosmeceutical business to find potential niches for growth in developed markets and to build new positions in the most resilient regions of the emerging markets. With a permutation of underdeveloped consumer markets, growing economies and vast

populations with increasing disposable incomes, it is easy to see why cosmeceuticals manufacturers are drawn to producing high quality, innovative and top priced brands.

Brand equity regarded as a key marker of a healthy brand is explored intensively by both researchers and practitioners as a dynamic contributor in effective brand management. Brand equity, referred to as "the incremental utility or value added to a product by its brand name" [4], has been construed as a primary asset for many industries. Hence, monitoring brand equity becomes essential for effective brand management. According to Yoo and Donthu [7], brand equity has substantial positive effects on a company including influence on future profits and long-term cash flow, willingness of consumers to pay premium prices, merger and acquisition decisions, sustainable competitive advantage, and in all, successful marketing. Brand management is also held to play a key role in framing of corporate strategies [8].

Brand name is a cue for recognizing successful brands and is always linked with images that have been shaped by their experiences with a brand [9]. Familiar brands signal trust and are likely to be preferred by consumers who may make a brand judgment solely on brand familiarity. Consumers learn to predict product quality based on brand attribute cues [10]. They tend to develop a sort of association between brand attributes, brand benefits and a brand over time-based

on direct experiences such as trial or indirect experiences such as advertising [6,2]. Brand building also results in positive benefits such as defending against competitors and building market share [2]. When customers begin to develop a loyalty to a particular brand they buy more, are willing to pay higher prices and generate positive word-of-mouth images about the brands [11-13]. Hence, a better understanding of brand equity measurement is essential for meaningful brand management strategies.

Review of literature

Brand equity

A brand described variously as “a set of assets (and liabilities) linked to a brand’s name and symbol that adds to (or subtracts from) the value provided by a product or service to a firm and/or a firm’s customers” [5]; “the differential effect of the brand knowledge on consumer response to the marketing of the brand” [2]. Similarly, Yoo and Donthu [7], define brand equity as “consumer’s differential response between a focal brand and an unbranded product when both have the same level of the marketing stimuli and product attributes.” According to Srinivasan *et al.* [14], brand equity is defined as “the incremental contribution (in money value) per year obtained by the brand in comparison to the underlying product (or service) with no brand-building efforts.” It is the added value endowed by the brand name [15] and comprises brand loyalty, brand awareness, perceived quality, brand image, and brand association [16]. According to Morgan’s [17] equity engine model of brand equity, there are two classes of equity components - Functional performance and affinity. The former is category specific, while the latter is a set of universal rules for the emotional side of branding.

To summarize the brand equity literature has formulated three main perspectives of brand equity: The financial perspective, the customer-based perspective, and the combined perspective [2]. The “financial brand equity is based on the incremental discounted future cash flows that result from a branded product’s revenue over the revenue of an unbranded product. On the other hand, the customer-based brand equity is defined as the differential effect of brand knowledge on a customer’s response to the marketing of the brand” [2]. The combined perspective incorporates both financial brand equity and customer-based brand equity.

Measuring brand equity

Researchers have adopted different approaches to quantify/measure brand equity. Keller [14], Park and Srinivasan [18], and Yoo and Donthu [7] employed perceptual, or psychological measures to gauge brand equity, whereas, Kamakura and Russell [19], used actual consumer and market behavior to compute brand equity. Aaker [5], combined both market behavior-related measures and perceptual measures to outline a framework to measure brand equity.

This study focuses on the customer-based perspective of brand equity, of Aaker [16] and Keller [2]. This model was advocated also by various other researchers. Customer-based brand equity is operationalized into two categories: Consumer perception and customer behavior (like brand loyalty) [7,20-24]. Although many researchers hold customer-based brand equity to include only perceptual dimensions, Aaker’s [16] definition of customer-based brand equity includes both perceptual and behavioral dimensions. This broader conceptualization has been widely accepted and employed by many researchers.

Konecnik and Gartner [25] projected a three component model of brand equity - namely, cognitive, affective, and conative. The cognitive component represents an awareness that is associated with what the consumer knows or thinks about a brand. The affective component is built on how one feels about this knowledge. The conative component is the action stage that relates to how one act on the information and how they feel about a brand. Konecnik and Gartner [25] believed that the dimensions of perceived quality and brand image influence the affective

component more when attitudes and feelings toward what is known, i.e., brand awareness, are appraised. Brand loyalty, whether attitudinal or behavioral, is pertinent to the conative component.

Collectively, brand equity consists of four dimensions: Brand awareness, perceived quality of brand, brand image (or associations), and brand loyalty [5,7,16]. Yoo and Donthu [7] also campaign the use of these dimensions to investigate the findings of marketing and consumer behavior research in relation to brand equity. Thus, both perceptual and behavioral components of brand equity and a causal relationship between perceptual and behavioral dimensions have been advocated. The strength of taking both perceptual and behavioral dimensions into account when measuring brand equity is that the consumer perceptions are clearly an antecedent to behavioral manifestations of brand equity. Although behavioral measures of purchase reveal the existence of equity, they fail to expose the factors actually driving equity without evaluating the perceptual dimension of brand equity [20].

Brand awareness is “the ability for a buyer to recognize or recall that a brand is a member of a certain product category” [16] and it includes both brand recognition and recall [2]. According to Keller [1], brand recognition “is the extent to which a person is able to recognize a particular brand given a set of brands.” Brand recall is “the extent to which a person is able to remember a brand, given a product category or need.” Aaker [5], exposes various levels of brand awareness. These levels are brand recognition, brand recall, top of mind, brand dominance, brand knowledge, and brand opinion. In this study, the research instrument included questions related to brand opinion and brand knowledge.

Perceived quality is “the consumer’s judgment about a product’s overall excellence or superiority” [13]. Brand image is “a set of brand association that is anything linked in memory to a brand, usually in some meaningful way” [16]. Leone *et al.* [26] define them as the associations held in consumer memory based on perceptions of an organization. This study adopts Aaker’s conceptualization of brand image.

Brand loyalty is defined as “the attachment that a customer has to a brand” [16]. Brand loyalty plays a significant role in generating brand equity not only because of its capacity to keep a customer loyal, but also because customer’s loyalty extends to the other brands in the company’s portfolio [27]. Oliver [28] defined loyalty as “an attained state of enduring preference to the point of determined defense.” There are two parts in this definition: One is the enduring preference and the other is the point of determined defense. Enduring preference indicates that purchase of the product is repeated again and again, and “the point of determined defense” means that the consumer defends himself from the aggression of competitors. Mellens *et al.* [29] refer to brand loyalty as “the biased behavioral response expressed over time by some decision-making a unit with respect to one or more alternative brands out of a set of such brands and is a function of psychological processes.” Although conventionally, loyalty is a component of brand equity [16], others argue that loyalty is an outcome of brand equity [30] and it may have a positive influence on the customer’s willingness to repurchase and recommend the brand [31]. Brand loyalty is seen as a component of brand equity by both traditional researchers [16] and contemporary scholars [31,32]. Whereas some studies confirm loyalty as an outcome of brand equity [30,33].

There exists a general misinterpretation between the terms brand identity and brand image. Kapferer [34] maintains that brand identity is brand management perspective because, unlike brand image, it is created by the brand owner. Aaker and Joachimsthaler [35] also reinstate the significance of brand identity. Aaker clarifies brand identity as “a unique set of brand associations that the brand strategist aspires to create or maintain.” To a consumer, these associations signify what the brand stands for and involves a promise that the customer can expect from the organization. Aaker classifies three types of

brand associations when conversing on measures for brand equity. The three types of associations are the brand as a product, brand as an organization and brand as a personality. This study has considered the associations related to the product in the form of perceived value associations, and associations related to organization, when framing the questionnaire.

Purpose of the study

This study intends to operationalize brand equity and form a standard measure of it that could be used across cosmeceutical products to measure brand equity. It attempts to provide an indication to a set of items that can contribute to brand equity so as to confirm a combination of these items to capture and explain brand equity. But whether these items are exhaustive have not been verified. Based on the dimensions depicted by Keller [12] and Aaker [5] a multidimensional scale to measure brand equity has been developed. The scale consisted of brand loyalty, perceived quality, brand awareness, brand image, and brand associations as different dimensions to capture brand equity.

METHODS

Instruments and measurements

The constructs of brand equity dimensions [2,16] and its impact on brand equity were conceptualized and operationalized using a 5-point Likert scale in the survey instrument. The overall Cronbach's alpha score of 0.904 indicates a very good reliability of the instrument used for the study.

Brand equity was measured using the weighted average method from the scores obtained from the five dimensions of measuring customer-based brand equity. Hypothesis testing with regard to the interrelationship of the dimensions of brand equity was analyzed, and an intercorrelation matrix was computed. Multi-stage regression applications have also been used to confirm the relationships.

Survey data and sample

The sample pool consisted of the selected 200 beauticians and consumers of a leading cosmeceutical brand using stratified random sampling method from among the universe of the users of the product in Tiruchirappalli, Tamil Nadu. Since the cosmetic products are unique in that, they have an ultimate consuming group and another intermediary group (Beauticians), both the groups were considered for the study. A five-dimensional scale to capture brand equity consisting of brand loyalty, perceived quality, brand awareness, brand image, and brand association was developed based on the conceptualization of these dimensions by Keller [2-4], and Aaker [5]. The questionnaire was designed based on literature reviewed was used as the survey instrument including all the constructs, which were operationalized using a 5-point Likert scale. Some questions conceptualizing composite brand equity were also included.

Statistical tools

Collected data were analyzed with tools such as percentage analysis, correlation, weighted average computations of brand equity score. Correlations and regressions were used to confirm the component and consequential drivers of brand equity, respectively.

RESULTS AND DISCUSSION

The brand equity score computed using the average scores of the five major dimensions of brand equity worked to 2.27 for the customers and less than that (2.08) for the beauticians (Table 1).

Table 1: Brand equity score

Score	Beauticians	Consumers
Brand equity score	2.0877	2.2705

The descriptive statistics of the brand equity dimensions have been presented in Table 2. On a five-point scale, the item scores for the dimensions of brand equity were all very low (most of them less than the midpoint of 2.5). The overall scores for all the five dimensions were also very low, indicating very low brand performance, although these scores were relatively higher among the customers than among the beauticians.

Further, various indirect relationships among the brand equity dimensions were observed.

The inter-correlation scores obtained (Table 3) support the following hypotheses:

Based on the results obtained in Table 4, all the five dimensions, viz., brand awareness, perceived quality, brand loyalty, brand association, and brand image were found to significantly contribute to brand equity in both groups. A further analysis of the correlations obtained for tactical marketing decisions, reveals that perceived quality was very strongly related with both brand loyalty and brand image (0.920 and 0.837, respectively), and brand loyalty was very strongly related with brand association (0.874) among the beauticians group. In the case of the brand equity dimensions among consumers, brand association was very strongly related with brand awareness, perceived quality (0.824 and 0.802, respectively), and perceived quality was very strongly associated with brand image (0.769).

Further, the factor scores of brand awareness, brand loyalty, perceived quality, brand association, and brand image were used as an independent variable and regressed with brand equity as a dependent variable.

It is confirmed (from Table 5) that the coefficient of brand awareness, brand loyalty, and brand image is significant, while the coefficients of perceived quality and brand association were insignificant.

The possibility that brand loyalty would play a mediating role between perceived quality and brand equity needed to be verified. Similarly, the role of brand image as a mediator between brand association and brand equity should be verified.

Brand loyalty and brand image as mediators

Two separate regressions were run to check the mediating role of brand loyalty and brand image. The results of these regressions are shown in Tables 6 and 7. The results prove the mediating role of brand loyalty between perceived quality and brand equity (significant 0.000), and brand image between brand association and brand equity (significant 0.000). Thus, the outputs confirm that perceived quality and brand association do not have a direct impact on brand equity, but only an indirect impact, through brand loyalty and brand image.

Thus, the regressions confirm that perceived quality and brand associations are not causal drivers of brand equity as projected by Keller [2] and Aaker [16] but are only indirect drivers.

CONCLUSION

Implications for practice

A considerable proportion of the consumer respondents has shown conspicuous strong feelings about the brands they patronize. In an industry with abundant choices and very low switching costs, these mindsets/outlook can transform into valuable brand loyalty, higher levels of spending, and also the person-to-person promotion of the brand to others. The study provides a model to brand management through understanding brand equity building. The projected brand equity map portraying brand awareness, brand loyalty and brand image as causal drivers and perceived quality and brand associations as indirect drivers of brand equity may well be considered as a framework

Table 2: Descriptive statistics – Brand equity dimensions

Variables	Mean±Standard deviation	
	Beauticians	Consumers
Gender	1.8600±0.49852	1.6667±0.49961
Age	2.8200±0.79959	2.5933±0.96369
Education	2.7000±0.95131	2.7333±0.99854
Income	2.0200±0.79433	1.7000±0.73719
Brand awareness		
Recognize these brands among other brands	2.2030±0.67671	2.3057±0.48104
Aware of these brands	1.9576±0.70143	2.2337±0.47563
Characteristics of these brands come to mind quickly	2.1302±0.70801	2.3588±0.51401
Quickly recall the symbol or logo	2.0284±0.63681	2.3019±0.47631
Quickly recall the slogan	2.1562±0.66490	2.4229±0.48756
Quickly recall the commercial jingle	2.1398±0.72848	2.3545±0.50829
Noticed the signboards	1.9594±0.65939	2.2124±0.51404
Perceived quality		
Offers good quality services	2.0106±0.65153	2.2347±0.46225
Offers very reliable services	2.0452±0.63028	2.1739±0.46867
Quality of services are consistent	1.9926±0.60779	2.1998±0.46157
Likely quality are extremely high	2.0580±0.57751	2.2817±0.45857
Utilization convenience	2.0406±0.54422	2.2331±0.49051
Brand loyalty		
Intention to stay loyal	2.2178±0.60025	2.2431±0.48124
Recommend to others	2.2430±0.60756	2.2904±0.46016
First choice for future purchase	2.3004±0.63995	2.2439±0.46192
Shift to another brand next time	2.5186±0.73794	2.4453±0.47591
Prefer these brands	2.2726±0.62721	2.3361±0.48760
Price of these brands	2.2896±0.50347	2.2462±0.39526
Satisfaction of consumer needs	2.2344±0.47621	2.2204±0.45890
Brand association		
Trust the company	1.9534±0.60618	2.2289±0.48797
Like the company	1.9880±0.63792	2.3075±0.48347
Company really cares about its customers	1.9838±0.55675	2.3089±0.46218
Honest brand	1.9558±0.55188	2.2074±0.45097
Offers value for money services	1.9630±0.60862	2.2232±0.46950
Brand image		
Clean image	1.9824±0.60341	2.1876±0.50624
Strong image	2.1326±0.63282	2.3215±0.47433
Overtime they are very consistent in what it stands for	2.1106±0.55697	2.3106±0.46779
Familiar brand	2.0224±0.63375	2.2414±0.47898
Brand equity		
Strong brand	2.2580±0.50387	2.2211±0.43594
Attractive brand	2.2634±0.60094	2.2527±0.46318
Unique brand	2.3778±0.59627	2.2672±0.47176
Likable brand	2.2668±0.53546	2.2525±0.46435
Well-known brand	2.4660±0.51632	2.3726±0.50860
Overall scores		
Brand awareness score	2.0866±0.52339	2.3128±0.34863
Perceived quality score	2.0294±0.53721	2.2246±0.35964
Brand loyalty score	2.2966±0.42676	2.2893±0.30509
Brand association score	1.9688±0.50255	2.2551±0.35808
Brand image score	2.0620±0.55449	2.2652±0.39754

Table 3: Hypothesis testing

Hypothesis	Beauticians	Consumers
H ₁ : Brand awareness has a significant positive impact on brand equity	0.684**	0.700**
H ₂ : Perceived quality has a significant positive impact on brand equity	0.781**	0.647**
H ₃ : Brand association has a significant positive impact on brand equity	0.828**	0.661**
H ₄ : Brand image has a significant positive impact on brand equity	0.846**	0.609**
H ₅ : Brand loyalty has a significant positive impact on brand equity	0.841**	0.724**
H ₆ : Brand awareness has a significant positive impact on perceived quality	0.694**	0.802**
H ₇ : Brand awareness has a significant positive impact on brand association	0.698**	0.824**
H ₈ : Brand awareness has a significant positive impact on brand image	0.720**	0.599**
H ₉ : Perceived quality has a significant positive impact on brand association	0.598**	0.675**
H ₁₀ : Perceived quality has a significant positive impact on brand image	0.837**	0.769**
H ₁₁ : Perceived quality has a significant positive impact on brand loyalty	0.920**	0.760**
H ₁₂ : Brand association has a significant positive impact on brand image	0.880**	0.648**

**indicates the significant positive correlation

Table 4: Intercorrelations - Brand equity dimensions

Type of user	Brand equity	Brand awareness	Perceived quality	Brand loyalty	Brand association	Brand image
Beauticians						
Brand equity	1					
Brand awareness	0.684**	1				
Perceived quality	0.781**	0.674**	1			
Brand loyalty	0.828**	0.698**	0.920**	1		
Brand association	0.846**	0.720**	0.598**	0.874**	1	
Brand image	0.841**	0.598**	0.837**	0.795**	0.880**	1
Consumers						
Brand equity	1					
Brand awareness	0.700**	1				
Perceived quality	0.647**	0.802**	1			
Brand loyalty	0.661**	0.676**	0.760**	1		
Brand association	0.609**	0.824**	0.675**	0.789**	1	
Brand image	0.724**	0.652**	0.769**	0.624**	0.648**	1

Table 5: Regression analysis of brand equity components

Brand Equity Components	Unstandardized coefficients		Standardized coefficients	t	Significant
	B	Standard error	Beta		
(Constant)	0.055	0.118		0.469	0.643
Brand awareness	0.273	0.071	0.243	3.588	0.000
Perceived quality	-0.168	0.085	-0.153	-1.786	0.078
Brand loyalty	0.510	0.096	0.411	5.217	0.000
Brand association	-0.159	0.088	-0.141	-1.631	0.107
Brand image	0.531	0.067	0.564	8.012	0.000

*Dependent variable: Brand equity

Table 6: Regression analysis – Perceived quality and brand loyalty

Variables	Unstandardized coefficients		Standardized coefficients	t	Significant
	B	Standard error			
(Constant)	0.875	0.084		10.426	0.000
Perceived quality	0.658	0.039	0.778	17.306	0.000

*Dependent variable: Brand loyalty

Table 7: Regression analysis – Brand image and brand association

Variables	Unstandardized coefficients		Standardized coefficients	t	Significant
	B	Standard error			
(Constant)	0.614	0.142		4.375	0.000
Brand awareness	0.706	0.063	0.635	11.495	0.000

*Dependent variable: Brand image

for developing brand strategies.

Implications for research

The influence of brand promotion efforts like company’s marketing communications, offers and other price promotions on brand—has not been taken into account, but deserve more research efforts in the future. Similarly, a corporate brand image which is a prominent concept in brand literature and which makes the brand name more identifiable by customers have not been considered in this study. Further research efforts need to assimilate company promotions and the resulting

corporate image on individual brand image. Moreover, the study in this paper is limited to a single monolithic brand in the cosmeceutical sector, and hence cannot be generalized.

Summary

The outcomes of the study confirm that cognitive components of perceived quality and brand association were less contributing to brand equity and the affective component of brand loyalty had stronger underpinning on brand equity construction and hence play an important role in brand management. The brand equity structure gives a very good clarification of brand equity drivers and also their relationships, to formulate a cause and effect model. The model can form a basis for more action-based tactical and operational marketing strategies for other product categories by adding specific questions/items which are particularly important for the individual brands and the company.

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