

# Green Attributes and Customer-Based Brand Equity: Synthesis and Examination of Banking Services

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## ABSTRACT

Mounting concern for the environment and pressure from various stakeholders, particularly regulatory authorities, has led firms to adopt an 'environment-centric' approach in their manufacturing and service operations. Academicians and researchers too have examined and reported positive outcomes of firms' demonstration of green-focused activities in the form of improved market and financial performance. However, green marketing practices have largely been investigated for their impact and linkages in an independent manner, rather than in conjunction with the elements of customer-based brand equity (CBBE). The present work addresses this void in literature by empirically investigating the synthesis and association between green practices of the banking sector and the

three components of CBBE i.e. quality, image and loyalty. Using a structured questionnaire, responses of 166 bank customers were analysed to test the hypothesized relationships of the proposed framework. The results establish a strong and positive impact of 'policy-based' green attributes of banks on all three constituents of brand equity. Based on the findings, the paper draws useful implications for the banking sector and outlines the scope for future research in this pertinent domain.

**Key Words:** *Green attributes, Customer-based brand equity, perceived quality, Brand image, Customer loyalty*

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## 1. Introduction

Over the past few decades, environmental deterioration, global warming, climate change, greenhouse gas emissions and other such environmental issues have become central themes for deliberation by academicians, researchers and other members of the society. Increasing environmental consciousness amongst various stakeholders has put pressure on businesses to incorporate sustainability concerns in their policies and processes, the impact of which is felt equally by both manufacturing and service firms.

The situation is no different for developing countries like India which are facing the additional dilemma of striking a balance between economic growth and ecology (Pandey and Kumar 2016). Factors such as high initial cost, inadequate capital, long payback time, and absence of stringent guidelines further create obstacles in the adoption and implementation of green practices at a national level. In such a scenario, banks and financial institutions play a decisive and indispensable role of mobilizing financial resources and channelizing them towards socially responsible investments. It would not be inappropriate to state that for India too, innovation in the financial sector in the form of 'green banks' can pave the way towards environmental sustainability. It is in this context that the paper contributes to the extant literature in terms of analysing and validating the association between green attributes introduced by firms in the banking sector and the components of customer-based brand equity.

## 2. Green Focus in the Banking Sector: Initiatives and Classification

Until a few years back, sustainable practices were not prominent in the banking sector as banks and financial institutions did not perceive green practices as a remunerative business opportunity. It is only recently that 'green banking' has gained attention in the Indian financial system. The term 'green banking' incorporates policies and practices that make banks sustainable in environmental, economic and social

dimensions. The focus is on carrying out banking operations with an objective to minimize the environmental impact of carbon footprint and carbon emissions (Bhardwaj and Malhotra 2013) as well as lending cautiously so as to curb investments having adverse environmental impact (Shaumya and Arulrajah 2017). Besides deploying business intelligence services to maximize economic gains from their core activities, increasing number of companies in the financial sector are shifting priorities to capitalize on opportunities from sustainable business ventures.

In India, this shift in focus can mainly be attributed to the pressure from RBI and other regulatory authorities due to which banks and financial institutions in both public and private sectors are discovering ways to delineate themselves as 'green banks' and are progressively taking environmental friendly measures for overall sustainable development of the economy. Some of these efforts include the implementation of innovative IT technologies, paperless transactions, waste management practices, green projects and technologies. More specifically, SBI's green home loan scheme, ICICI Bank's waiver of processing fee of cars using alternate form of energy and its concessional home finance offers for buying LEED (Leadership in Energy and Environmental Design) certified buildings are some of the green practices adopted by Indian banks. Few other banks such as Punjab National Bank, Axis Bank and IndusInd Bank have also taken remarkable initiatives in going green.

In order to ensure convenient, speedy, cost-effective and paperless transactions, banks are increasingly providing online and mobile banking services to their customers. SBI's 'green-channel banking', ICICI Bank's 'Go Green' and 'Instabanking' facility are some of the steps in this direction. Kotak Mahindra Bank launched 'Think Green' initiative in 2013, encouraging customers to take e-statements and adopt electronic copies of its annual reports. The bank also conducted tree plantation drives with 'Grow-Trees.com' and installed rainwater harvesting systems as part of its

green initiatives. ICICI's 'Human aur Hariyali' campaign is another landmark initiative in this regard. In addition to their efforts to save energy and earn carbon credits by reducing greenhouse gas emissions and carbon footprint, banks have been striving towards sustainable development through initiatives that include green buildings, using mass transportation systems, conducting environmental protection awareness programs and community development activities, and are using cell phones to also reach out to the unbanked and rural citizens who have never been exposed to banking services before (Chakraborty 2019).

Taking into consideration the fact that the extent of eco-friendly efforts may differ across firm size and nature of service provided, researchers have provided varied classifications of green practices or attributes for different aspects of services. Though scholars have proposed green service categories based on a wide range of green activities (such as green offerings, projects, communications, internal operations and supply chain) espoused by service firms, it is seen that the dimensions have been largely guided by the broader framework of green marketing and CSR and as such, majorly constitute three primary dimensions: health concerns, environmental concerns, and social concerns (Kwok et al. 2016). For instance, while Biswas (2011) identified two dimensions of environment-focused banking services viz., '*environmental risk management*' and '*development of environmentally-oriented products*', the study by Kulsum and Huda (2018) classified green practices of banks as '*greening of internal operations*' and '*funding of green projects*'. Research by Agrawal (2014) categorized green banking activities on three aspects – *processes* (e.g. waste management and minimization, paperless transactions, end-of-life management systems), *products* (i.e. goods and services that provide sustainable market based solutions for customers), and *strategies* (i.e. practices related to creating awareness of environmental issues, energy audits, reduction of carbon footprints and communication of green policies). Biswas (2016) supplemented this

study by adding two more dimensions to the classification that include '*other green banking activities*' (in the form of concessional loans for green projects, introduction of green funds, trading in carbon credits, and indulging in community and national social initiatives), and '*green infrastructure practices*' (constituting environmentally-sensitive infrastructure projects taken by developers and municipal decision makers).

Another study by Nagpal and Gupta (2016) empirically validated three categories of green practices i.e. *green delivery, green support, and green policy* that are followed by firms in the services sector. The present study adopts the aforesaid classification and examines the three types of green attributes for their differential impact on the components of customer-based brand equity.

### **3. Customer Based Brand Equity (CBBE): Concept and Components**

In simple terms, brand equity is the worth that customers assign to a brand and reflect the same in the manner they think, feel and act towards it (Bhadra and Rego 2019). The concept has been defined by several researchers from three broad perspectives, namely the financial, the marketers', and the comprehensive perspective. While some studies have examined these perspectives with company orientation (e.g. Simon and Sullivan 1993), others have focused on the customer orientation (e.g. Aaker 1991, Keller 1993, Namkung 2013). The present study takes into deliberation the customer-based perspective of brand equity, defined by Aaker (1991) as "a set of brand assets and liabilities linked to a brand, its name and symbol that adds to or subtracts from the value provided by a product or service to a firm and/or to the firm's customers". According to this perspective, brand equity may be viewed as a differentiation mechanism which provides competitive advantage to firms in the form of lower marketing costs, higher revenues and profits, and greater market share.

Due to the homogeneity of the products offered by banks, maintaining and enhancing brand equity becomes an indispensable tool for survival and growth. A well-established brand not only carries a robust brand image but also provides customer satisfaction (Wood, 2000) and benefits such as greater customer loyalty, low switching behaviour, strong brand associations, enhanced marketing communication effectiveness, opportunities for brand extension and higher profit margins for the company (Chen 2010).

Researchers have considered brand equity to be composed of multitude of brand aspects such as perceived quality, loyalty, awareness, image, value, strength, and association (Aaker 1991, Feldwick 1996) that have later been proposed as the key components of brand equity. This is reiterated by Bhadra and Rego (2018) who posited that many of these conceptualizations of brand equity aim at creating a positive customer mind-set.

As the present study is undertaken in the context of banking services, perceived quality, brand/ corporate image and customer loyalty are included as the three components of customer-based brand equity (CBBE). A brief discussion of these components is provided below.

### **3.1 Perceived Quality**

Perceived quality has been a subject matter of interest in the area of service marketing. Defined as “the consumer's judgment about a product's overall excellence or superiority relative to alternative brands”, measurement of perceived quality is an attitudinal assessment of a brand (Zeithaml 1988, Keller 1993). The concept of perceived quality has been found to play a pivotal role in people-based industries, like the banking sector. Policy changes and information technology revolution have not only intensified competition in this sector but have also made customers more discerning and demanding, compelling banks to reassess their customer service programmes to focus on their image, operational

efficiency, productivity and the quality of service portfolio as a whole.

Researchers have understood perceived service quality to be composed of multiple dimensions and accordingly have suggested various scales to measure the construct in the context of different service settings (e.g. Parasuraman et al. 1988, Brady and Cronin 2001, Carman 1990, Dabholkar et al. 1996). The present study, however, examines it as a dimension of brand equity and adopts the views of past studies (e.g. Ariffin et al. 2016, Lasser et al. 1995, Namkung and Jang 2013) in conceptualising perceived quality as consumers' overall and subjective judgement of bank service, measured through items that focus on totality of bank performance.

### **3.2 Brand/Corporate Image**

Brand image can be understood as a “set of beliefs” held about a specific brand (Aaker 1991). In other words, it is a subjective perception that indicates the customer's overall mental impression of the product or service (Keller 2003) and the organization as a whole. Previous studies have observed that brand image facilitates consumers' need recognition and brand purchase decisions (Hsieh et al. 2004) and thus have posited it as a valuable tool for organizations in terms of strengthening brand position, creating positive attitudes and feelings for a specific brand, enhancing brand equity and determining a firm's financial success (Aaker 1991, Janiszewski and Osselaer 2000, Keller 1993). Brand/ company image occupies a pivotal position in affecting a customer's choice, especially when the products or services cannot be differentiated on the basis of tangible cues (Mudambi et al. 1997). As good corporate image is noticeable, banks too use it as an important tool to improve their competitive position and draw both repeat as well as new customers.

### **3.3 Customer Loyalty**

In the increasingly competitive marketing environment, proper handling of customers and their loyalty has become an essential component of

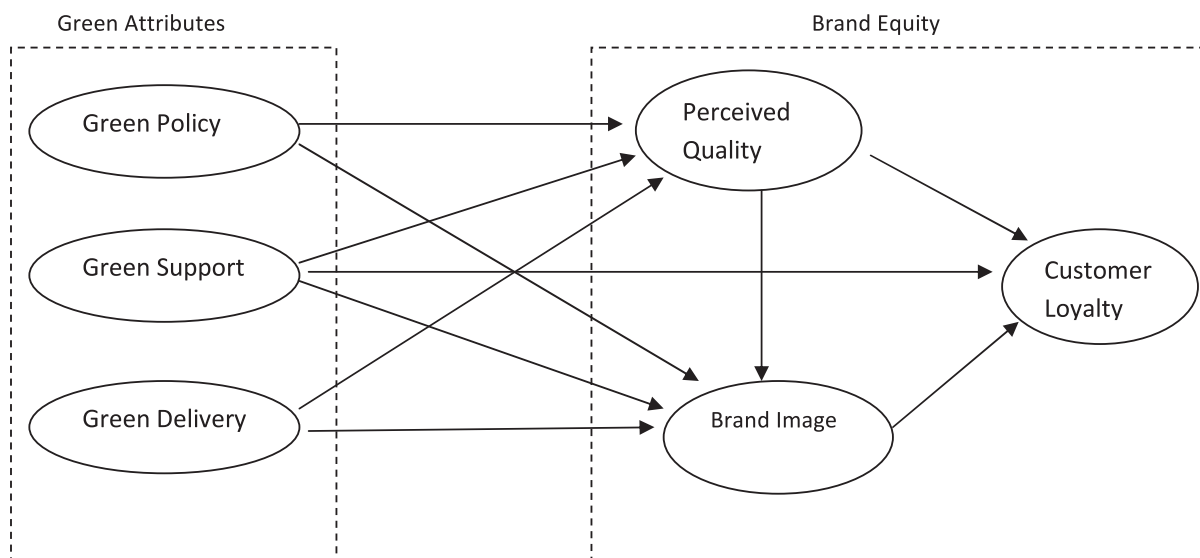
business strategy. The concept holds relevance due to its ability to provide both intangible as well as tangible outcomes such as customer retention, improved business performance, reduced customer acquisition costs and sustainable competitive advantage (Wong and Zhou 2006). Though the construct has been considered complex and defined differently by researchers, it has largely been understood as “a deep commitment of consumers to buy or re-patronize a preferred product or service consistently in the future” (Aaker 1991, Oliver 1999). Further, extensive research in the domain of customer loyalty depicts it to be a blend of attitudinal and behavioural elements (Javalgi and Moberg 1997). As such, it is inferred that customer loyalty involves fostering of a favourable attitude for the firm that is followed by a positive behaviour of buying from it and recommending it to others (Dick and Basu 1994).

In accordance with earlier studies, the present work too includes customer loyalty as one of the elements

of brand equity and adopts a mix of preference, repeat patronization and positive recommendation, as manifestation of customers' loyalty towards a bank.

#### 4. Linkages and Hypotheses: The Conceptual Model

The linkages between the individual components of brand equity as well as their influence on firm performance have been well established in marketing literature. A growing realization of the benefits of 'green' in terms of cost, reuse of resources, meeting compliance requirements and most importantly, creation of brand equity (Bhardwaj and Malhotra 2013) has provided a further impetus to marketers to study the aforesaid construct in conjunction with a firm's demonstration of green attributes. It is in this direction that the present work presents a framework to investigate the green banking practices in concurrence with three components of CBBE. A discussion of the various hypothesized relationships of the conceptual model proposed in Figure 1 is provided.



(Source: Literature Review)

Figure 1: The Conceptual Model

#### 4.1 Inter-linkages between the Components of Brand Equity

It has been found that a reputable image not only facilitates firm performance in the form of increased market share, effectiveness of marketing communication, cooperation and support, and profit

margin, but also perceived quality and customer satisfaction (Bloemer et al. 1998). By providing product information, brand image serves as a stronger 'shorthand' cue to the perceptions of quality and value associated with a product/service. Further, as one of the core constituents of brand equity, studies have

found perceived quality to be related to brand choice, brand purchase intent, willingness to pay a higher price (Aaker 1991, Lee et al. 2010), brand equity value (Yoo et al. 2000) and loyalty-related behaviours (Jain and Gupta 2015, Omoregie et al. 2019).

In addition, previous studies posit brand image as a driver of customer loyalty (e.g. Merrilees and Fry 2002). Further, extending the linkages of image and loyalty to brand equity, the study by Lassar et al. (1995) posits brand equity to emerge from customers' confidence in a brand in relation to the competing offerings. This later transforms into their loyalty and willingness to pay more for the brand. Thus, it can be inferred that loyalty reflects the strength of brand/corporate image. While a weak image may result in switching behaviour, a strong reputation can develop intentions to patronize, recommend and pay more. Thus, it is hypothesized that:

**H<sub>1</sub>:** Perceived quality positively impacts brand image

**H<sub>2</sub>:** Perceived quality positively impacts customer loyalty

**H<sub>3</sub>:** Brand image positively impacts customer loyalty

#### 4.2 Green Attributes and Brand Equity Formation

Recent studies consider green practices to be tangible evidence that consumers can use to perceive quality (Namkung and Jang 2013). Current research studies also indicate that green-focused attributes can drive corporate image and provide evidence of its association with reputational advantage, enhanced marketing and financial performance, and customers' green behavioural intentions (Chen 2008, Jeong et al. 2014, Miles and Covin 2002). Examining corporate image within the framework of corporate social responsibility, studies have further established its pivotal and mediating role in the link between CSR and firm performance (e.g. Galbreath and Shum 2012). Based on the aforesaid discussion, following hypotheses have been formulated:

**H<sub>4</sub>:** Green attributes positively impact the components of brand equity

**H<sub>4a</sub>:** Green service delivery positively impacts perceived quality, brand/corporate image and customer loyalty

**H<sub>4b</sub>:** Green service policy positively impacts perceived quality, brand/corporate image and customer loyalty

**H<sub>4c</sub>:** Green service support has a positive impact on perceived quality, brand/corporate image and customer loyalty

**H<sub>5</sub>:** Perceived quality mediates the relationship between green attributes and customer loyalty

**H<sub>6</sub>:** Brand image mediates the relationship between green attributes and customer loyalty

### 5. Research Objectives

With an exception of a few studies (e.g. Cretu and Brodie 2007, Chang and Fong 2010), there has been a lack of research examining the components of brand equity juxtaposed with a firm's green focus. The present study attempts to address this void through the three-fold objectives that aim to:

- (i) Analyse the green attributes for their impact on individual components of CBBE
- (ii) Examine the inter-linkages between the three components of brand equity, and
- (iii) Assess the mediating role of perceived quality and image in affecting the linkage of green attributes with customer loyalty

### 6. Methodology

Using a structured questionnaire, the study collected primary responses from bank customers in Delhi-NCR region. A detailed review of existing literature on the banking sector helped in identifying ten banks<sup>3</sup> that have incorporated various green initiatives in their policy and operations. Due to implementation of green practices by these banks, a decision was taken to approach their customers with a request to provide responses to survey questions of the current research. Customers from various branches of these banks were

<sup>3</sup> Yes Bank, Kotak Mahindra Bank, Punjab National Bank (PNB), Axis Bank, State Bank of India (SBI), IndusInd Bank, ICICI Bank, HDFC Bank, Bank of Baroda and Canara Bank.

approached on their visit to the bank and were asked to fill the questionnaire while they waited to be served by the banking personnel. Of the total 400 customers approached (around 40 customers from each of the ten banks), only 166 customers agreed to participate and provide their responses for the study. The sample set had a higher percentage (64 percent) of male respondents. 61 percent of the bank customers were young (less than 30 years of age) and majority of them belonged to middle income segment.

The three sections of the questionnaire collected information related to background of respondents as well as sought responses on all key measures under study. As the study did not entail any analysis across consumer demographics, only basic information such as respondent's age, gender and income were included in the first part of the questionnaire, while the remaining two sections included statements related to customers' perception of a bank's green practices, perceived quality of service, image and customer loyalty. Previously validated scales with slight modification in wordings were adopted for operationalizing all the constructs.

Consistent with the previous study by Nagpal and Gupta (2016), a set of 19 items was used to capture the green attributes of banks. These attributes related to three types of green-focused activities pertaining to banking services viz. those related to banks' green policy (6 items), service support (7 items) and delivery (6 items). Respondents were requested to assess the performance on each of these attributes based on their experience with the chosen bank. Using the work of Yoo and Donthu (2001) and Namkung and Jang (2013), a five-item scale was used to measure customers' perceptions of brand image. Similarly, five statements in line with the previous studies (Chen 2010, LeBlanc and Nguyen 1996) were adapted to measure respondents' overall perception of perceived quality. Following the work of Han et al. (2011), Jeong et al. (2014), Maxham and Netemeyer (2002), and Zeithaml et al. (1996), customer loyalty was measured through a set of five items that broadly reflected customers' 'attitude towards bank', 'willingness to visit

again' and 'recommendation' with respect to the chosen bank. A five-point Likert scale was used to obtain respondents' agreement/disagreement on all the statements. Item description and reliability analysis of the measures is provided in Tables 1 and 2.

## 7. Analysis and Discussion

Adopting a three-stage approach, the study first assessed the reliability and validity of the components of green attributes and brand equity. The second stage tested the measurement models using Confirmatory Factor Analysis (CFA). This was followed by testing of hypothesized relationships of the proposed research model using Structured Equation Modelling (SEM) in the third stage. Maximum likelihood method was used to examine the relationship between green attributes and the components of customer-based brand equity. A detailed discussion of the findings is provided as under:

### 7.1 Reliability and Validity Estimates

As reported in Table 1, reliability of the items for the three components of brand equity as well as the three components of green attributes is tested using Cronbach's alpha. Alpha values higher than 0.70 (Nunnally 1978) indicate internal consistency of the items constituting the main construct. In conjunction with the structural model, reliability tested through composite reliability too establishes the presence of internal consistency between scale items with all values above 0.80. In the next step, the construct validity was examined. AVE values greater than 0.5 in Table 1 clearly indicate the existence of convergent validity for all the constructs. Similarly, values of MSV and ASV less than AVE are indicative of the discriminant validity.

**Table 1: Reliability and Validity Estimates**

	Cronbach's Alpha ( $\alpha$ )	Composite Reliability	Average Variance Extracted (AVE)	Maximum Shared Variance (MSV)	Average Shared Variance (ASV)
Perceived Quality	0.852	0.855	0.641	0.552	0.579
Brand/ Company Image	0.848	0.854	0.641	0.541	0.559
Customer Loyalty	0.878	0.879	0.692	0.494	0.474
Service Policy	0.928	0.929	0.685	0.388	0.236
Service Support	0.943	0.947	0.717	0.388	0.223
Service Delivery	0.927	0.929	0.687	0.085	0.071

(Source: Analysis of Primary Data)

### 8.2 Confirmatory Factor Analysis (CFA)

In the present study, a second-order CFA was performed with respect to two latent constructs, viz., green attributes (19 items) and customer-based brand equity (15 items). As posited in literature, the results presented in Table 2 confirm three categories of green attributes viz. *Green Service Policy*, *Green Service Support* and *Green Service Delivery*, and three components of customer-based brand equity viz.

*Perceived Quality*, *Brand/Corporate Image* and *Customer Loyalty*. The factor loadings of all the items are close to 0.70. The fitness of the model is analyzed through the values of CFI, NFI, TLI, CMIN/df and RMSEA. In the present study, the value of RMSEA is close to 0.08, value of other goodness of fit indices i.e. CFI, NFI, and TLI are close to 0.90 and the value of CMIN/DF is within the acceptable range of 1-5, collectively indicating an overall good model fit.

**Table 2: Factor Loadings and Model Fit Indices**

	Item No.	Factor Loadings	CFI	NFI	TLI	RMSEA	CMIN/df
<b>Green Service Policy</b>	P1	.903	0.931	0.922	0.840	0.123	4.991
	P2	.871					
	P3	.736					
	P4	.818					
	P5	.862					
	P6	.775					
<b>Green Service Support</b>	S1	.900	0.970	0.958	0.941	0.096	3.091
	S2	.815					
	S3	.783					
	S4	.890					
	S5	.859					
	S6	.774					
	S7	.863					



	Item No.	Factor Loadings	CFI	NFI	TLI	RMSEA	CMIN/df
<b>Green Service Delivery</b>	D1	.858	0.971	0.960	0.933	0.103	3.380
	D2	.925					
	D3	.764					
	D4	.823					
	D5	.803					
	D6	.788					
<b>Perceived Quality</b>	Q1	.684	0.902	0.892	0.705	0.106	4.934
	Q2	.800					
	Q3	.726					
	Q4	.748					
	Q5	.714					
<b>Brand/Company Image</b>	I1	.824	0.916	0.906	0.749	0.102	3.924
	I2	.760					
	I3	.645					
	I4	.656					
	I5	.775					
<b>Customer Loyalty</b>	L1	.780	0.959	0.949	0.878	0.111	4.290
	L2	.839					
	L3	.742					
	L4	.781					
	L5	.715					
<b>Green Attributes (Overall Model)</b>	19 Items	--	0.832	0.796	0.786	0.123	3.195
<b>Brand Equity (Overall Model)</b>	15 Items	--	0.894	0.844	0.853	0.086	2.679

(Source: Analysis of Primary Data)

#### 8.4 Structural Equation Modelling: Testing of Hypotheses

##### Assessment of Linkages between Components of Brand Equity

SEM analysis was conducted to assess the linkages between the components of brand equity. The first stage involved an examination of the impact of customers' perception of a bank's service quality on its image as held in the minds of the customers. The results, provided in Table 4, reveal a significant and positive influence of perceived quality on image ( $\beta=0.82$ ,  $p=0.00$ ). In the next step, the impact of these components in affecting customer loyalty was examined. Though the results once again show a significant positive influence of both quality ( $\beta=.71$ ,

$p=0.00$ ) and image ( $\beta=.67$ ,  $p=0.00$ ) on loyalty of bank customers, a relative comparison establishes perceived quality as a stronger predictor of customer loyalty. The findings, in all, lend support to the acceptance of  $H_1$  and  $H_2$  that perceived quality of service has a positive and significant influence on both image as well as loyalty of the customers towards the bank. The hypotheses that bank image positively impacts customer loyalty ( $H_3$ ) too is accepted in the present work.

##### Impact of Green Attributes on Brand Equity Formation

The hypothesized relationship between green attributes and the components of brand equity ( $H_4$ ) is

examined using the technique of Structural Equation Modelling (SEM). With majority of the values in the acceptable range, the analysis finds an overall good fit for the linkage between green marketing practices and brand equity. The results presented in Table 4 reveal a significant impact of all three categories of green attributes on the components of brand equity (p values= .000). However, in comparison to the attributes related to green delivery, the policy-based

green practices have a stronger influence on perceived quality ( $\beta=.58$ ), image ( $\beta=.59$ ) and loyalty ( $\beta=.61$ ). Though significant, the green attributes related to service support are found to perform a weaker role in formation of customer-based brand equity. The findings thus support  $H_4$  ( $H_{4a}$  to  $H_{4c}$ ) in confirming the impact of the three types of green attributes on the components of brand equity.

**Table 4: Results of Hypotheses Testing with SEM**

Linkages between the Components of Brand Equity				
	$\beta$ value	Critical Ratio	P value	$R^2$
Quality----Image	0.82	8.030	.000	0.666
Quality----Loyalty	0.71	7.345	.000	0.502
Image----Loyalty	0.67	7.240	.000	0.446
Impact of Green Attributes on Brand Equity				
	$\beta$ value	Critical Ratio	P value	$R^2$
Delivery----Quality	0.39	4.180	.000	0.148
Delivery----Loyalty	0.45	5.179	.001	0.204
Delivery----Image	0.31	3.402	.000	0.096
Policy----Quality	0.58	5.892	.000	0.329
Policy----Loyalty	0.61	6.836	.000	0.371
Policy----Image	0.59	5.666	.000	0.346
Support----Quality	0.31	3.416	.000	0.091
Support----Loyalty	0.38	4.420	.000	0.140
Support----Image	0.28	3.075	.002	0.075

(Source: Analysis of Primary Data)

### The Mediating Role of Brand Image and Perceived Quality

The four-step approach of Baron and Kenny (1986) was used to examine the mediating role of both quality as well as image in influencing the relationship between green attributes and customer loyalty towards banks. The findings of step 1 to 4 are presented in Table 5 in two stages. In the first stage, the mediating role of brand image was investigated. The independent impact of green attributes on loyalty, ignoring the mediator in step 1, turned out to be significant

( $\beta=0.63$ ,  $p=.001$ ). The regression of green attributes on quality, performed in step 2, was also found significant ( $\beta=0.57$ ,  $p=.000$ ). Step 3 of the mediation process revealed the regression of quality on loyalty to be significant ( $\beta=0.71$ ,  $p=.000$ ). Lastly, step 4 of the analysis, after unconstraining all the paths, revealed green attributes as having significant influence on loyalty but with decreased regression weights ( $\beta=0.34$ ,  $p=.000$ ).

A similar process was repeated in the second stage to

examine the mediating impact of perceived quality in the link between green attributes and customer loyalty. The results of step 1 to step 3 revealed significant influence of green attributes on both loyalty ( $\beta=0.63$ ,  $p=.001$ ) as well as image ( $\beta=0.55$ ,  $p=.000$ ). Further, the impact of image on loyalty was also found to be significant ( $\beta=0.67$ ,  $p=.000$ ). However, unconstraining all the paths in step 4, the results once again reveal a significant impact of green attributes on

loyalty but with reduced regression weights ( $\beta=0.36$ ,  $p=.000$ ).

In sum, the significance of the relationship between green practices and customer loyalty decreased due to the mediating effect of both quality as well as image. The findings therefore provide only partial acceptance to  $H_5$  and  $H_6$ .

**Table 5: Mediation Results-Four Step Procedure**

Steps	Model	Linkages	Effects
Step 1- Step 3	Constrained Model	GA-----LOY IV DV	.63*
		GA-----Q IV M	.57*
		Q-----LOY M DV	.71*
		GA-----LOY IV DV	.63*
		GA-----IM IV M	.55*
		IM-----LOY M DV	.67*
		Step 4	Unconstrained Model
		After mediator IM GA-----LOY (IV) (DV)	.36*(Significant but lower SRW, IM partially mediates the relationship between GA and LOY)
		GA----Q----LOY	Partially accepted
		GA----IM----LOY	Partially accepted

(Source: Analysis of Primary Data), Notes: \* $p<.005$ , IV: Independent Variable, DV: Dependent Variable, M: Mediating Variable, GA: Green Attributes, Q: Quality, IM: Image, LOY: Loyalty

## 9 Conclusion and Implications

The existing literature in marketing has well established the role of brand equity and green-focused marketing strategies in bringing positive outcomes for business firms. These constructs, however, have mostly been analysed independently and less in conjunction with each other. In an attempt to bridge this void and contribute to the existing literature, the present work undertakes a comprehensive evaluation of the green practices of banks in combination with the inter-linkages between the three components of

brand equity, i.e., perceived quality, image and customer loyalty. The study provides intriguing findings with useful implications for firms in the banking sector.

To begin with, the results of the study establish the differential impact of service attributes (related to policy, support, and delivery) in affecting the three components of brand equity. Though most of the banks are found to be performing well on delivery-related activities (such as elimination of post-dated

cheques, sending emails, reducing consumption of paper, switching off machines when not in use) that reflect a high degree of environment focus, the impact of such activities on brand equity components is found to be lesser in comparison to that exerted by policy-related green attributes. Quite interestingly, policy-related attributes such as having a clear environment policy, conducting environmental training programs and measuring environmental performance regularly are the kind of activities that do not involve customers directly and thus are less explicit or visible to them. Yet, a strong impact of this type of green-focus on loyalty, image and quality perceptions suggests that customers assign greater weightage to an organization's deep-rooted commitment to environment that is imbibed and implemented through its policies, rather than merely getting swayed away with its more visible green pursuits under the wrap of corporate social responsibility.

With regard to CBBE, the results reveal banks to be performing well on all three components i.e. quality, image and loyalty. However, there is scope to improve the quality of staff and quality of information provided to customers. As the chosen banks did not emerge as the first choice for their customers, banks need to create differentiation by enhancing their service quality and developing a greener image. So far as the inter-linkages are concerned, the study finds a strong and positive connectedness between constructs and posits both quality and image as predictors of customer loyalty.

From the managerial viewpoint, some of the practical implications arising from the current work are discussed as under:

#### **Focus on Green that Matters**

The results show the varying impact of three categories of green attributes on customer-based brand equity of banks. Thus, instead of taking all kinds of green initiatives, it is suggested that banks should prioritize their efforts and allocate more resources to strengthen the policy-related green initiatives (such as

obtaining green certifications - ISO 14000 and including environmental information while taking credit and investment decisions) due to a stronger influence of such practices on customers' perceptions and loyalty behaviours as found in the present work.

#### **Develop Green Branding and Positioning**

The findings indicate that customers' perception of the environment practices demonstrated by firms is an important driver of their market image. Banks can therefore link their environment commitment and concern to project a green image and use this as an effective branding and positioning strategy. In order to avoid any confusion related to the validity of their environmental claims, it is important that green actions are communicated clearly on the bank's website, advertisements, and other marketing communication materials.

#### **Leverage the Relationships**

In view of the linkages between the three CBBE components as well as amongst green attributes and the elements of brand equity well supported through the study results, it is recommended that institutions in the banking sector leverage on the relationships between these constructs to achieve customer retention and enhanced market performance. In this direction, banks should aim at an integrated blend of these constructs in the marketing programs to develop a green image, foster long-term relationships and inculcate green loyalty. Furthermore, schemes such as 'green points' to reward employees and customers for readily opting for internet/ mobile banking and actively participating in banks' organization of green awareness and training programs/events may be introduced to induce greener customer behaviour. Stimulating a green culture could lead to the development of a new segment of 'green banks' in future.

### **10 Applicability and Generalizability**

With efforts and investments being made all around the globe to address the problem of deteriorating environment, the paper examining the impact of green

practices has universal applicability. In fact, it is not the concern for environment but the adoption and implementation of green practices that differ across developing and developed economies. While the efforts of developed nations are more visible, the problem of deteriorating environment is more severe in developing economies where urban population is growing exponentially and not enough resources are available to undertake green measures or adopt cleaner technologies. In respect of such developing economies like India, banks and financial institutions play a critical role in directing resources to not only tackle the ecological problems but also by making these efforts more effective and sustainable in nature. The study therefore has large applicability and the implications arising out of its findings can be generalized to other developing countries like China and South Africa.

With respect to customer-based brand equity, the components and their inter-linkages are widely discussed in extant marketing literature, thereby lending support to the universality of the construct and its application in various goods and service settings. The sample respondents comprising of customers of banks that have actively taken green initiatives in the last few years too are comparable to bank customers of other countries in terms of their demographic profile. In this respect, the responses can be generalized. It is largely due to the cultural and contextual differences that consumers' perception of a firm's image, quality assessment and loyalty intentions may differ across geographies. Banks and financial institutions in different countries also differ in their performance and delivery of banking services and so may hold different equity for consumers of different regions.

Given the wide applicability and generalisability of the study, banks in both developed as well as developing economies should make efforts to adopt the green measures suggested in the paper to save the planet and effectively reap the benefits of favourable customer-based brand equity.

## 11 Limitations and Future Research Directions

The study has a few limitations that may be addressed by future research. First, despite repeated follow-ups, the study could gather responses from only 166 bank customers. The study is also confined in terms of emphasizing three categories of green attributes that may not be equally significant or relevant for all kind of services. Undertaking studies with larger sample size and context-specific green attributes may help in further expanding the literature concerning green marketing practices. Second, the study has not examined the impact of green practices on market and financial performance of banks. Future studies may extend the model by including some financial and non-financial performance indicators into the assessment. It would also be enriching if a comparative study is conducted across public, private and foreign banks so as to clearly establish green attributes as a distinguishing parameter in formation of customer-based brand equity. Lastly, further interesting insights can be generated by investigating the role of demographic elements and level of environment consciousness in affecting consumers' perception of green attributes and loyalty-related behaviours.

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