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### **Abstract**

Today, when brands offer products to consumers, buyers often question if the product or its production process are linked to the environmental, social or economic challenges being faced by mankind. Business researchers such as Sheth (2011) and Hunt (2011) have reported the inquisitiveness of customers in this direction as an opportunity for marketers to create differentiation based on the concerns of brand towards overall issue of sustainability being faced by the mankind. The authors have synthesized knowledge from various domains with a positivistic approach to understand sustainability from the perspective of branding. Using empirical knowledge this study recommends embedding sustainability into brand knowledge and brand value for creating a differentiation for the brand in a competitive market.

### **Introduction**

Do sustainability concerns of a brand lead to differentiation? This question is being frequently asked by practitioners and academic researchers (Zott, 2003; Miles and Covin, 2000; Green, 2008; Lowitt and Grimsley, 2009). Recent changes in climate events have raised serious concerns and are pushing businesses to approach sustainability from a broader view point and a long term perspective (Levy and Egan, 2003; Sheth et al., 2011). From a sustainability viewpoint, marketing researchers such as Connelly et al (2011) and Chabowski et al. (2011) recommend that managers should embed sustainability concerns into their brand if they want to create differentiation by successfully addressing the present-day and future demands of their customers. The shifting trends in the way customers have started to think about businesses reflect the change required in the marketing strategy of companies (Banerjee, 2001). Such change is important from both marketing and management perspectives as needs of consumers today have moved from innovative products to sustainable products (Armstrong and LeHew, 2011). In view of these pragmatic shifts, there is resurgent interest in practice about our identification of the link between sustainability concerns and brand differentiation that becomes the brand selection criteria of customers (Green 2008; Lowitt and Grimsley, 2009).

Traditional utilitarian approach towards brands has been used as tools by managers to enable consumers to differentiate them from their competitors (Berry, 2002; Pechmann and Ratneshwar, 1991). To counter global competition, application of branding theories enables managers to drive their customers across home boundaries to associate, assess, evaluate and differentiate them from their competitors (Shocker et al., 1994; Alba et al., 1997). Successful development and management of a brand in a competitive market today requires a reputation built on favorable evaluations of motivated consumers (MacInnis and deMello, 2005). One such evaluation can be built using sustainability concerns as they demonstrate responsible behavior to requirements of mankind (Kakabadse et al., 2005). Today consumers are seeking a stronger emotional connection with the brand and often look for brand differentiation that is meaningful based on its sustainable practices (Kurowska, 2003).

In an analysis of a capitalistic view of the coffee market, Linton et al. (2006) studied the impact of pricing and management related matters on sensitive issues such as unfair trade practices. Their findings highlight supply driven marketing efforts as an appropriate solution to adopt the philosophy of linking trade with practices ethical in nature towards its consumer segment. Connelly et al. (2011) reported that consumers perceived green brands to be of higher quality and produced through more ethical practices. A report published by World Business Council for Sustainable Development with the support of University of Cambridge highlighted how integration of sustainable development into the activities of an organization can improve its brand value. The report recommends that managers responsible for brand management should lead sustainability concerns from a marketing perspective as they create differentiation for brands.

In case of brands known for not contributing to sustainability issues, consumers tend to develop a disapproving outlook and unfavorable attitude towards the brand over a period of time (Clancy and O'Loughlin, 2002). Green and Macmillan (2011) reported that both consumer and investors seek information from the brands about the efforts they make to address environmental issues. Even not so strong brands can contribute to the social welfare. Such contributions reduce negative influence of corporate actions or processes on mankind (Varey, 2011). Lately various researchers have elaborated on the process of adopting practices that address sustainability concerns and its influence on customer behavior (Godichaud et al., 2011; Pedron and Caldeira, 2011). Communicating similar concerns has been recommended for building brand knowledge and brand value for corporate reputation in the literature by Luo and Bhattacharya (2006). Various other studies have discussed the sustainability as a concern for marketers and its outcomes (Connelly et al. 2011; Crittenden et al. 2011). However, there is a gap in the academic literature the about influence of sustainability driven actions in the context of brand differentiation.

Our purpose is to examine the linkages between sustainability based brand knowledge and brand value as drivers of brand differentiation that can affect brand selection criteria of customers. Although a few studies in this area of research, particularly on role of marketing in building sustainability of businesses are available, this research will be one of the initial studies in this domain that will investigate the identified relationships in the context of brands. For empirical testing, we have developed a set of measures for brand differentiation in the backdrop of sustainability. We begin by defining the constructs and linkages between the identified constructs. The business sustainability construct identified includes environmental, social and economic sustainability based actions of a brand which are discussed as

determinants of brand knowledge and brand value that together builds brand differentiation. The next section will present a review of existing literature on these constructs. Following sections will explain methodology and discuss findings and analysis. The finally limitations implications and the conclusion of the research conducted are presented.

## **Literature and Hypotheses**

Conventionally, the marketing function in an organization is considered to be responsible for identifying needs and wants of its target segment and creating business opportunities within the target segment by building differentiation (Hult, 2011). Recent shifts in the awareness about the role played by businesses in sustainability has driven marketers to focus on the requirements of its environmental, social and economic dimensions and correlate them with desires of consumers (Jin and Zailani, 2010). This new demand of consumers makes it challenging for marketing managers to embed sustainability concerns into their marketing strategies and to ensure both commercial and non-commercial benefits from branding such as profits and differentiation respectively (WBSCD Report, 2005). The academic literature proposes integrating marketing activities with branding philosophies to create differentiation in a competitive market (Chernatony and O'Rile, 1998; Vargo and Lusch, 2004). Recent practitioner reports and anecdotal information recommends driving brand differentiation with actions based on three dimensions of sustainability for enabling managers to analyze the performance of their marketing actions (WBSCD Report, 2005; Peloza and Yachnin, 2008).

Sustainability has been defined in the literature as ability of an organization to favorably drive its actions towards concerns and welfare of people, planet and profits in a way that the company will be able to empower itself to meet its own and its customers' current and future requirements successfully (Chabowski et al., 2011; Crittenden et al., 2011). Sustainability oriented concerns and actions of brands are dependent upon cumulative efforts of various individual and cross-departmental functions of an organization (Closs et al., 2011). For example, a function such as supply chain management can contribute to efficient product movement with minimum use of natural and organizational resources. The human resources department can contribute by motivating staff to adopt sustainability actions in their routine functions such as use of paper or electricity to reduce the negative impact of business activities on the triple bottom line of people, planet and profits.

Communicating individually and frequently about various dimensions of sustainability related concerns and actions can build knowledge that leads to the favorable reputation of a company (Gill et al., 2008). Lowitt and Grimsley (2009) reported that consistency of a balance in three dimensions when maintained by companies helps them sustain competitiveness and differentiation even while there are market disruptions or industrial disturbances or changes in the leadership. The high performance business model of Lowitt and Grimsley (2009) reflects on the sustainability concerns that can lead the company towards growth, profitability, positioning, consistency and longevity. Their model when studied from a marketing perspective discusses business opportunities, retaining customers, premium pricing and product distribution policy to fulfill its requirement for growth. While for profitability Lowitt and Grimsley (2009) consider the role of product life cycle policy and use of technology apart from consistency in positioning and relationship based marketing, they also recommend the

demonstration of socially responsible behavior for driving profits and achieving sustainability objectives.

Another camp of sustainability researchers today are blaming marketers for over promoting products based on the argument that they have pushed consumers to go beyond their genuine requirement of products and over consume products without being mindful of the consequences of over consumption. Sheth (2011) recommended that marketers should adopt a customer-centric approach towards sustainability to debate the irresponsible behavior of brands that motivates customers to over consume products. He recommends the demonstration of responsible behavior by creating awareness of mindful consumption in the consumer segment. Marketers could redirect consumption towards healthy, reduced, regulated and adequate consumption. Researchers such as Frank (1999) recommend application of consumption tax to be levied on over consumption of products which might lead to long-term happiness.

Czinkota (2011) introduces the term 'curative marketing' to indicate a new direction to marketers in their efforts to satisfy needs and develop further. The term 'curative' has been used by Czinkota (2011) to emphasize the sense of restoring and developing health, for all and 'restoring' to indicate that there is something lost which was once there, but no longer is sufficiently present right now and 'developing' refers to new issues and areas which should be addressed by managers with help of new tools and frames of reference. While a 'health' related managerial effort highlights the effect of their actions on human life, it places marketers in a difficult position that reflects on their marketing orientation efforts stress and requires them to address, resolve and improve.

Marketing can do so by aiming beyond its traditional focus of consumer, cost and price, communication and distribution, and incorporating in its activities a determination of joy, contribution to pleasure, fulfillment, safety and growth, apart from advancement towards a better society. On an international level there is the need to think across borders, and to take joint actions. Doing so will not only make a crucial difference how companies and individuals live and get along with competitors and neighbors, but will address the rising long term challenges, the resolution of which goes beyond the capabilities of any one nation.

As per scholars such as Sheth (2011) and Czinkota (2011) who have justified why should all this be part of marketing based on an argument that in a volatile world, marketers are placed by businesses in the frontline to respond to customer needs, to address disruptions and to find new bridges which facilitate interaction and progress. Although all facets of human activity are likely to be affected by global changes, the marketing field, which constitutes the key liaison between the world, the brand, and the individual, is likely to be under the most pressure. Marketers deal specifically with the activities of supply and demand, key dimensions being re-shaped every day. Affirming and devising new distribution, logistics, and supply chain avenues is inherent in marketing. Developing cross-border pricing strategies is a crucial marketing dimension which affects global well-being. Communication by brands, governments, and by consumers amongst themselves and between each other to precipitate knowledge, understanding and collaboration, even in an age of social media, are all marketing activities.

Curative international marketing proposed by Czinkota (2011) will allow businesses to use the discipline and knowledge to recast their aspirations in the context of

human lives, to help redefine their interaction with individuals and the world, and to internally inspire the company to reach a level of contentment. The goal is to have international marketing, with all its capabilities to analyze, to inform and to persuade for a mere increase in consumption and to move away from imposing new demands and to hold consumers as captive audience of their brand. Such a role of marketing will rather demonstrate to businesses how to achieve sustainability based satisfaction where quality outdistances quantity, and joint success increases the wellbeing of the individual. This kind of satisfaction will create differentiation for the businesses on a regional and a global level. The marketing literature indicates that differentiation based on sustainability actions should be linked backwards to customer perceptions of value contributed by the brand and the inability of competitors to emulate that value (Mentzer and Williams, 2001). To outperform competitors, businesses need to communicate consistently about their concerns to innovatively contribute social value while they address current and future requirements of customers (Day, 1994). As recommend by author such as Sheth et al. (2011) and Mentzer and Williams (2001), companies should take a proactive approach by developing a customer focused strategy which addresses sustainability issues.

Integration of sustainability into the value creation process by companies is being embraced by managers not for altruistic purposes, but for creation of competitive reasons and demonstration of a differentiation (Lewitt, 2011). Gill et al. (2008) used the triple bottom line to understand the sustainability efforts of companies reported through the web and found that sustainability reporting can build knowledge that assists in the creation of brand differentiation and ultimately can lead to a favorable corporate reputation. Lewitt (2011) recommended that managers should use Porter's five forces model to view their sustainability concerns and actions from the view point of differentiation. While current knowledge reports economic and social elements of sustainability to be very important for brand differentiation, its ability to drive economic dimension of brand differentiation i.e. the ability to drive behavior of consumers when they make purchases in a competitive market needs to be understood. The consideration of three dimensions of sustainability while approaching brand differentiation can create tangible value for businesses (Lewitt, 2011). Authors such as Maio (2003) have indicated that linking brand with sustainability actions requires calibrating the promise that a brand makes with the benefits it provides. A dimension of brand related research highlights the relationship between attitude of customers towards a brand and their intentions as facets of brand differentiation (Dick and Basu, 1994). As per the consumer behaviour research, brands should fill the gap between attitude of consumers towards the brand and actions taken by them while they make purchases by differentiating themselves using mental imagery held and cognitive elaboration made by consumers about the brand (Schlosser, 2003; Keller, 1993). Imagery as per Schlosser (2003) is a determinant of purchase intention that is built upon information gathered, encoded, processed and ceased as experience by customers in the form of concrete but sensory representation of their knowledge that is reflected in their judgment of brand as intentions. The recent shifts in the attitude, intentions and judgments of customers based on sustainability requires scales that will assess brand based on different parameters that have not been developed so far by academic researchers. Although some scales are available that relate brand to environmental or social or economic concerns individually but no study till date has made an attempt to identify and develop measures that can be used by managers to assess the brand using sustainability parameters. This research uses literature from various

different domains to identify key issues draw a set of sustainability based assumptions and empirically test them for making recommendations.

## **Antecedents in the backdrop of Sustainability**

### **Social Concerns and Actions**

The social dimension of sustainability necessitates businesses to adopt the philosophy of stewardship (Persley, et al. 2007). Social stewardship requires businesses to promise and provide a better quality of life to all by taking actions that are oriented towards addressing the challenges faced by the society in which the business operates (Case, 2001). In light of globalization and indirect linkages the scope can be expanded to include even societies in which a brand does not yet operate. Companies try to take actions that address issues such as poverty alleviation, improving work conditions, health systems or education avenues that can demonstrate their concern for society (Closs et al. 2011). The purpose of such social actions taken by the brands is to fulfill management; sense of obligation and to publically demonstrate a sense of responsibility (Peattie and Morley, 2008). The World Health Organization in 2006 reported service provision, resource generation, financing and stewardship as the essential elements of knowledge creation and also recommended them to be considered as a part of corporate governance by businesses (WHO, 2006). The report holds companies responsible for demonstrating effective stewardship by identifying the need, creating a vision, implementing the vision as a strategy and influencing change for creating situations of enablement. The marketing literature emphasizes on the role of social dimension of sustainability in creation of value that can be utilized to identify new opportunities for businesses (Tsoi, 2010). As social dimension has been studied extensively, literature reflects on various measures that can be used to assess its ability to create differentiation. These arguments have not been studied previously in the context of branding theories. The argument we present here is that health or education related social concerns of a brand not only facilitate creation of brand knowledge but also influences the perception of the overall value that a brand contributes. Thereby, we hypothesize that:

H1: An increase in the concern of a brand about health related challenges being faced by the society in which it operates will improve the (1) brand knowledge (2) brand value perceived by its customers.

H2: An increase in the concern of a brand about the nature related challenges being faced by the society in which it operates will improve the (1) brand knowledge (2) brand value perceived by its customers.

H3: An increase in the concern of a brand about the education related challenges being faced by the society in which it operates will improve the (1) brand knowledge (2) brand value perceived by its customers.

### **Environmental Concerns and Actions**

Various environment research studies have highlighted the role that businesses play in the volatile nature of the environment (Dincer, 2003; Ferreira et al. 2006). Management changes

may be required for adapting to new weather conditions (Gurtoo and Antony, 2009; Pegg et al. 2011). Actions such as performing business functions in an eco-friendly manner with minimum use and maximum conservation of energy apart from efficient waste management builds favorable perceptions about the environmental friendliness of the company (Shami, 2006; Kohler, 2006). The marketing literature recommends that concerns about such requirements of sustainability should be addressed carefully by businesses with environment friendly actions as it influences customers, perceptions of brand value, changes preferences when customers make purchases, and drives the overall long-term health of the business (Cronin et al., 2011; Chabowski et al., 2011). The argument that businesses can use actions such as pollution control and energy conservation to create brand knowledge and brand value proposes important hypotheses to be examined by this study:

H4: An increase in the concern of a brand about pollution related environmental challenges being faced by the society in which it operates will positively influence the (1) brand knowledge (2) brand value perceived by its customers.

H5: An increase in the concern of a brand about energy conservation related environmental challenges being faced by the society in which it operates will positively influences the (1) brand knowledge (2) brand value perceived by its customers.

H6: An increase in the concern of a brand about energy restoration related environmental challenges being faced by the society in which it operates will positively influences the (1) brand knowledge (2) brand value perceived by its customers.

H7: An increase in the concern of a brand about waste management related environmental challenges being faced by the society in which it operates will positively influence the (1) brand knowledge (2) brand value perceived by its customers.

### Economic Concerns and Actions

To manage differentiation in a competitive market, business economics theories require managers to synthesize concepts of both macroeconomics with microeconomics in terms of tradeoffs, rationalities and incentives by considering both explicit and implicit costs (Spulber, 1994; Lazear, 2000). From a sustainability perspective, the costing of public goods is not always possible; e.g. air pollution (Menon and Menon, 1997; Walker and Hnason, 1998). The over-usage or wrong usage of public goods negatively influences the reputation of a company (Lantos, 2001; Daub and Ergenzinger, 2005). While changes in consumption patterns can be correlated to the profits that a company makes, the value created by company through efficient management of public goods for addressing sustainability issues improves the reputation of a company (Zeithaml, 1988; Steenkamp and Hofstede, 2002). Managers try to use substitution effects that encourage operations to be highly sensitive to sustainability issues in their business practices while making a profit (Sheth, 2011). This change requires brand managers to take conscious decisions about ethical practices adopted by their brand for the successful sale or delivery of its products. Apart from considering incentivizing customers for the recycling of products and reducing the cost of products, there also needs to be wastage of resources, or restricted use of child labor (Snider et al., 2003; Wilkie and Moore, 1999). Favorable knowledge and perceptions of customers about value contributed by brands allow managers to



gain economic benefits for their business (Zeithaml, 2000; Rust et al., 2004). Application of these concepts into the sustainability based actions when adopted by a brand from an economic perspective can be even more beneficial to the company. To empirically, understand this argument, we have hypothesized:

H8: An increase in the concern of a brand about fair trade related economic challenges being faced by the society in which it operates will positively influence the (1) brand knowledge (2) brand value perceived by its customers.

H9: An increase in the concern of a brand about product recycling related economic challenges being faced by the society in which it operates will positively influence the (1) brand knowledge (2) brand value perceived by its customers.

H10: An increase in the concern of a brand about profitability related economic challenges that a business takes to demonstrate its concern for the society will positively influence the (1) brand knowledge (2) brand value perceived by its customers.

### **Consequence: Brand Differentiation**

Various researchers have discussed brand as a differentiator for enabling customers to make selections in a competitive market (Wilkie and Moore, 1999; Narayandas and Rangan, 2004). Customers look for contemporary reasons to associate with a brand where they have too many choices available to them (Fournier, 1997). This new aspect of branding requires managers to consider both the emotional and rational aspect of their brand to deliver long-term benefit to customers as a reason for associating with a brand (Delgado-Ballester and Munnera-Aleman, 2001). The growth in the popularity of green brands encourages managers to focus on sustainability for creating brand differentiation (Westley and Vredenburg, 1991). Sustainability links emotional needs based on its two facets namely 'social' and 'environmental' with rational requirements through the facet of 'economic' view of the business. Bahn (1986) studied the linkage between three prime constructs of branding "brand knowledge", "brand value" and "brand differentiation". When consumers have an opportunity to make choices based on their knowledge and understanding of value contributed by the brand, a positive relationship was found. The literature on consumer behavior advocates the use of perceptions for driving behavior of consumers based on the argument that level of involvement and information of consumers influences their perceptions of brand value (Kirmani, 1990). Communicating information and involving customers using a brand enables companies to build stronger association as customers relate the information to the brand and use it again to associate with the company when they are making purchases (Zeithaml, 2000). Repeated exposure of customers to brand related information and their experiences of involvement with the brand allows customers to be selective when they make purchase decisions. To this extent, we argue that

H11: Higher knowledge of customers about sustainability related concerns of the brand will increase their ability to differentiate between brands.

H12: Higher assessment of customers about value contributed by the brand to sustainability challenges of the society will increase their ability to differentiate between brands.

## Methodology

Our argument integrates the concepts of sustainability into the context of branding. The three dimensions of sustainability are placed in the research from brand a perspective. It encompasses two constructs as indicators of brand differentiation namely (1) brand knowledge of customers about the brand's sustainability actions and (2) perceptions of customers about value contributed by the brand. We used existing research studies to understand two constructs of branding in the light of sustainability actions taken (Keller, 2003; Steenkamp et al., 2003). These two constructs have not been studied in the existing literature from the perspective of sustainability. Therefore, synthesizing literature from various domains enabled us to develop new scales for the three constructs being investigated (Churchill, 1979). We used previous scales developed by other social science researchers for identifying the determinants of constructs (Churchill, 1979).

To empirically test the hypotheses an iterative process of research was adopted by the researchers (Bryman, 1984). First, a pool of items that were suitable for this study from the context of sustainability and branding was carefully identified from current academic knowledge about the focus of the research (Churchill, 1979). A research instrument based on secondary information collected from various anecdotal resources such as books, internet, consumer blogs and company websites apart from published academic literature on sustainability and marketing with high focus on branding was constructed (Burgees and Steenkamp, 2006). The first version of the measurement scale consisted of measures collected from existing empirical and conceptual understanding of the topic (Melewar, 2001). The sustainability orientation of three constructs namely 'brand knowledge', 'brand value' and 'brand differentiation' was tested using a multi-item scale. The scale of social aspect of brand knowledge and brand value at this stage consisted of six items taken from anecdotal sources of information and empirical knowledge provided by scholars such as Keller (2003). The scale of environmental concerns of brand that were conceptualized to build brand knowledge and brand value in the minds of customers was based on four items. These items were taken from the works of Steenkamp et al. (2003) and other non-validated information available through various secondary sources. The third dimension of sustainability i.e. economic dimension was embedded into the branding theories using three items based on the works of Snider et al. (2003) and Sheth (2011). Few of the items in the research instrument were reverse coded to eliminate the possibility of bias in the responses (Gerbing and Anderson, 1988). Finally, our research instrument was ready to be used for testing arguments that reflected a holistic view of different aspects of two diverse domains i.e. sustainability and branding.

## Sample and Data Collection

A set of hypotheses derived from the arguments were empirically tested using data collected from brand conscious customers for three reasons (Benjamini and Liu, 1999). First, these respondents were young consumers in the age group ranging between 20-35. Level of excitement towards using branded products in this age group as per literature is high (Holland and Chatterton, 2003). The respondents understood the value that a brand adds to a product or service (O'Cass and Frost, 2002). Second, these respondents had witnessed the recent

controversies related to the climate and environment. As a result they understood the implications of these events on the brand e.g. British Petroleum (BP) oil spill in the Gulf of Mexico during 2010. The respondents chosen were aware of the damages caused by this spill to habitat and the company. A report published by the U.S. government that blamed BP for measures that led to the oil spill was discussed with respondents. During the discussions, respondents were informed that negative influence of this incident on the image and reputation of BP was reported in the academic literature by Teather (2010). While a brand communicates a promise of quality (Aaker, 2004; Gupta et al., 2010), recommendation of Story and Hess (2010) that customers should view the actions of the company from an overall perspective before trusting the brand naively was also mentioned. Third, such an understanding of branding and sustainability encouraged the respondents to differentiate between brands based on sustainability based actions. Fourth, these respondents were students at a university in UK and came from different nationalities. They were chosen considering the diversity required in the demographic characteristics of respondents to understand the issue being studied and answer the research question. The two constructs of brand knowledge and brand value based on sustainability actions were interwoven as brand differentiation that had the ability to drive consumers to make favorable decisions when they make purchases. Testing of the identified constructs required us to iteratively proceed and go back to the literature (Melewar, 2000). As a result, we initiated the project with identification of the domain as the first step of empirical testing (Churchill, 1979). Descriptive statistics were helpful in ensuring that there were no violations while assumptions were made (Table 2) The empirical testing of the assumptions was performed using the final version of research instrument through two stages (1) a pilot test and (2) main survey (Churchill, 1979). The pilot test was an important component of the assumption evaluation as it enabled the researchers to evaluate the research design apart from validity and reliability of the research instrument and to identify questions that might mislead the respondents (Hudson and Ozanne, 1988). Pretesting of items was conducted by asking 30 respondents to identify questions they found inappropriate or difficult to respond to their feedback enabled us to refine the item pool by adding two new items, removing 3 items and modifying the way six questions were stated in the questionnaire (Silk and Urban, 1978). Removal of these items improved the alpha value indicating the enhanced reliability of the study (Melewar, 2001). A small set of 6 respondents were contacted again for ensuring precision in the way the research instrument had been revised. Now respondents were asked to critically assess and evaluate the items for clarity of communication and specificity of domain. Feedback received was used to further refine and finalise the research instrument (Churchill and Peter, 1984).

A random sampling method was chosen to collect data (Hurlburt, 1979). Data were obtained personally from consumers in the age group of 20-35 years who prefer to buy innovative and cost-effective branded products because their purchasing power is not very high, but simultaneously believe in the philosophy of branding and the power of a brand (Gong and Li, 2008). Respondents were first introduced to the objective of the study, to determine if the participant profile was suitable to the context of the research and if they were willing to participate in the research. After the introduction respondents were requested to fill out the research instrument and return it to the surveyor. They were also informed that they could decide not to participate in the research at any point of time.

The brand differentiation perceived by consumers was measured based on two constructs namely brand knowledge and brand value oriented towards sustainability concerns of the brand

based on the assumption that together they constituted brand differentiation for customers of the brand in turbulent times. The final instrument consisted of a total of 11 items, of which social orientation was used for grounding antecedents into sustainability using 6 items, environmental orientation of two antecedent constructs was based on 4 items and economic scale of determinants of brand differentiation consisted of 3 items. Impacts of sustainability concern based action of brands were measured by a scale consisting of 13 items. Respondents were asked to give a score to each item on a 7 point scale. The range of the scale provided was from 'totally disagree' to 'totally agree'. The research instrument was sent out to these respondents through field surveyors. A total of 1200 respondents were approached by field surveyors and 460 respondents agreed to participate in research. Data screening was used to eliminate records with missing data (Allison, 2002). Many consumers did not have an opinion about the economic dimension of sustainability so they had not responded to it. Also, the responses of some of the respondents seemed biased as they had chosen the same option for all the variables; hence, they were also taken out from the data for analysis purposes (Allison, 2002). Our response rate was 38.33% (Tse, 1998). Of that, 236 records were valid for empirical analysis. The characteristics of non-respondents were compared to the respondents and no particular pattern was found that could differentiate the two sets of data i.e. respondents and non-respondents.

## Analysis of Results

First, the correlation matrix table indicated that correlation coefficients were above 0.3 for all variables other than 'energy restoration' (Table 1). Only three out of five components extracted had an eigen value higher than 1 indicated the fitment of the data to the research question and validity of our research. The covariance matrix highlighted that these three components together contributed 69.78% of the variance (36.535, 17.827 and 10.605). The score of Kaiser-Meyer-Olkin (KMO) was used to measure sampling adequacy and appropriateness of the factor analysis (0.939). The scores of Bartlett's test of sphericity indicated that factor analysis conducted was appropriate (0.00). The scree plot also supported the conclusion that only three factors should be retained for further investigation (Figure 1). The reliability of the scale of these three factors was assessed during two stages i.e. pilot test and final survey, for inter-rater and retest reliability. The comments received from customers of the brand who had witnessed situations that can be correlated to sustainability were used to assess the face validity of the constructs identified by the authors. The academic and anecdotal research apart from views of subject experts was used to assess the construct validity. The coefficient score of individual items was used to assess the inter-consistency of the constructs. The scores received at two different stages were used for validation by making comparisons of mean and correlation scores received for individual items. These items were not perfect and inter-item correlation scores of some of the items indicated the presence of inconsistency. The mean scores for multi-item constructs were computed by equally weighting and adding up their scores. The reliability of each scale was assessed using cronbach alpha. The reliability statistics as alpha for the social dimension of brand differentiation construct with all the six items was found to be 0.879 and for the environmental dimension with four items namely 'pollution', 'energy restoration', 'energy conservation' and 'waste management' it was found

to be 0.692. Results indicated that removal of 'energy restoration' from the scale could refine the scale and improved the reliability of the construct to 0.866. Hence, this item was removed from the scale and not used further for empirical assessment. The construct of brand differentiation for its economic dimension of sustainability based on three items was found to be reliable with score of 0.793. The reliability of the scale of brand value based on sustainability based actions was also found to be high. The social dimension of brand value scored 0.919 while environmental dimension of brand value without refinement again scored low i.e. 0.565 and refined construct of environmental brand value with 3 items i.e. after removal of 'energy restoration' scored 0.877. The alpha score of the construct brand value based on economic dimension of sustainability was also found to be high with a score of 0.848. The reliability of total score of differentiation was found to be 0.753.

Next, the assumptions made were estimated using the regression. Results indicated a positive relationship between determinant and outcome variables (Table 1). Particularly the relationship between brand knowledge possessed and brand value assessed by customers based on care taken by the brand of health and education of the under privileged had a positive outcome of brand differentiation with a score of 0.698 and 0.726 respectively. The score of correlation between waste management and energy conservation efforts of the brand from the environmental perspective led to brand differentiation that was calculated at 0.683 and 0.727 indicating a positive relationship. Recycling from the economic context of sustainability indicated weak or poor correlation with scores of 0.608 and 0.585 for both brand value and brand knowledge. Correlation scores for all the variables with both the constructs of brand differentiation and brand value indicated that respondents had different views of the two constructs. In order to understand the ability of two constructs to drive the brand preference of customers as its antecedents, their total scores for the three dimensions of sustainability were computed by weighting and adding the individual item scores. The mean score of 'brand differentiation based on sustainability related actions' was found to be 60.51 with a standard deviation of 13.21 and a range of 68 out of possible range of 16 to 83. The total score of mean of the construct 'brand value based on sustainability based actions' was found to be 59.29 with a standard deviation of 13.76 and a range of 71 from a possible range of 13 to 83.

The correlation scores of relationship between the two constructs that were treated as antecedents to 'brand differentiation' were 'brand knowledge' and 'brand value' and were found to be significant of a level of 0.014 and 0.020 respectively. The coefficient statistics and scores of collinearity statistics helped us to assess the reliability and risk of multi-collinearity of the scales. The variance inflation factor was found to be appropriate as per the threshold level indicating absence of multi-collinearity (Table 1). The correlation scores without the item 'energy restoration' indicated high correlation between predictors i.e. brand knowledge and brand value with sustainability orientation and the dependent variable brand differentiation with score 0.941 and 0.946 respectively. The R square value was also found to be appropriate at 1.00. The results obtained from the regression empirically demonstrated the effect of independent constructs on the dependent construct i.e. brand differentiation. The normal probability plot did not suggest major deviations from normality (Figure 2). Overall all the hypotheses were accepted except H6 as it was not supported strongly by the item 'energy restoration'. The findings and their implications in terms of its contributions have been discussed in the next section.

## Findings and Implications

This section discusses significance of the findings from the context of this research. The rigour of the methodological approach adopted by researchers is also discussed. The questions asked by researchers in the research instrument were constructed considering the categorization bias and ensuring that there is no systematic error in any of the items across different constructs. The constructs were identified individually with their respective items based on the ones reported in secondary and empirical data available on the research topic. One of the sections of the survey form consisted of the scope of work followed by the research questions and options wherein respondents could make a selection from the given choices. In this section, respondents were asked to provide their demographic details such as age, gender and income, apart from their opinions about sustainability related issues. The overall approach was inductive as dimensions and arguments emerged iteratively, ensuring that the research was not too narrow and the variability in the constructs was measurable. The orientation of brand towards sustainability was iteratively categorized and aggregated as per the three dimensions of sustainability. The categorization was validated by subject experts before the pilot test and respondents during the pilot testing stage. The responses were useful for ensuring precision in identifying boundaries of constructs. We found the results to be interesting and contrary to prior research on sustainability in terms of the ability of the brand to play a role in driving preferences of customers parallel with the proposal of Closs et al. (2011) that value chain issues should be based on a broader perspective of requirements being addressed by the managers.

The two independent constructs and one dependent variable were conceptually grounded into the theory of sustainability and tested for causality. The results supported the relationship of causation conceptualized between the first (brand differentiation) and second (brand value) constructs as independent and outcome variable indicating convergent validity. The alpha demonstrated the reliability and belongingness of item to the constructs developed. However, the item 'energy restoration' did not strengthen the antecedent constructs. Hence, it was removed during the purification process. While the literature supports the notion of 'energy restoration' as an important aspect of any business (Hammond, 2007 and Chiras, 1995), the authors suspect that the item was not expressed, communicated or explained clearly to respondents in the questionnaire. The regression and analysis of variance scores indicated the variance in the dependent variable caused by independent variables and supported the construct validity and predictive validity. Our results indicated that branding activities, when embedded into sustainability theory, facing an increase in social dimension of sustainability will be supported with by at least six dimensions. The interpretation of this result suggests that brands should understand how they can benefit by linking the knowledge acquired and value assessed by customers about their sustainability efforts to their brand. In other words, in order to answer questions such as; is it possible to improve the outcome of branding by adopting sustainability based actions? The empirical findings indicate that branding based on sustainability concerns when conceptualized by marketing managers from a sustainability perspective can create brand differentiation and brand value. Future research on this topic will be able to suggest if sustainability driven brand differentiation is an important determinant of brand preferences of customers in a competitive market. Managers should approach sustainability from a branding perspective if they aim to drive brand preferences of customers in a turbulent market environment. It should also be noted that although a relationship between

'energy restoration' and brand knowledge and brand value was not supported by this research, it should be revisited by researchers in the future research on this topic.

Several issues related to different levels of management appear to be driving brand knowledge and brand value based on the notion that different sets of stakeholders seek different types of actions that can be related to their individual requirements (Russo and Fouts, 1997; Srivastava et al., 2001). Research also indicates that sustainability concerns cannot be facilitated by managers without the intentions and involvement of the top management of the company (Poter, 2008). However, motivation of middle and first-level management i.e. customer-facing employees is also critical to the adoption a sustainability approach by a managers (Moffett et al., 2002). Customers are becoming sensitive to the three dimensions of sustainability and are quite open and vocal about the role played by a company that particularly owns a brand (Abreu et al., 2011). Actions taken by managers reflect on the perceptions of the brand held by customers (Keller, 1993; Nandan, 2005). Importantly, sustainability appears to be a differentiating movement that involves all individuals linked to an organization (Szekely and Knirsch, 2005). The absence of intent by top management to approach sustainability from the viewpoint of brand management poses a high risk of loss to the brand, since such actions can reduce the willingness and sense of responsibility of middle management to take sustainability oriented actions which in turn affects the motivation of customers. The inter-departmental dynamics of an organization also plays an important role in the success of sustainability driven actions of the brand. Rewards for encouraging sustainability based actions may improve the ability of customers to differentiate between competing brands and attribute better value to their brand.

These discussions indicate that there are several areas which can be linked to sustainability for driving branding and demonstrating the concern and sense of responsibility of the company towards the needs of the society to customers. The most important aspect that may need immediate attention is the influence of sustainability based branding actions on the overall performance of the brand. Furthermore, the performance of the brand can be studied individually for tangible and intangible attributes. It would also be useful to investigate the assessment of customers about sustainability embedded brand actions on the health of the brand over a period of time in the form of longitudinal research. Finally, research should also consider the potential volatility of the brand equity built up by a brand. Dishonorable actions by only one employee or the convergence of disastrous circumstances can result in the destruction of an entire storehouse of brand benefits

## **Conclusion**

Traditional research on branding proposes that brand preferences of customers should be viewed from broader perspective. This research takes the holistic view of recent events and the way they have shaped requirements of customers to propose that embedding actions of a brand into the different facets of sustainability can enable managers to succeed in a competitive market. These actions as per the findings can build brand differentiation by enabling managers to build brand knowledge and brand value. We conclude that brand knowledge and brand value that responds to the requirements of customers and future needs of society will make a brand more attractive to customers.

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Figure 1

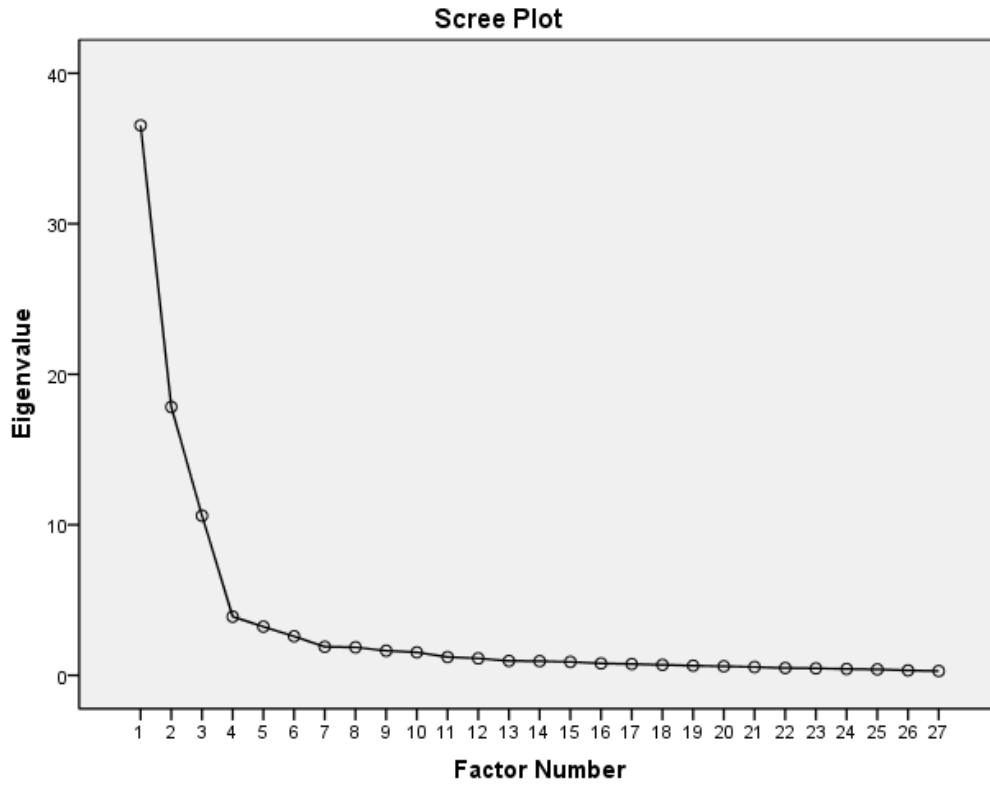


Table 1: Variable Diagnostics

Variable Description		Mean	Std Dev	Correlation
Know_social_health	5.3517	1.54067	0.320	Variance Inflation Factor
Know_social_nature_care	5.1441	1.44561	0.369	
Know_social_education	5.3771	1.62355	0.356	2.208
Know_environ_pollution	4.8771	1.52069	0.437	3.454
Know_environ_energy_restoration	4.8347	3.52894	0.225	2.647
Know_environ_energy_conservation	4.6695	1.47348	0.405	1.336
Know_envrion_waste	4.5932	1.56959	0.351	3.407
Know_economic_Fairtrade	5.2288	1.61330	0.464	2.867
Know_economic_recycling	5.2161	1.47024	0.402	2.301
Know_economic_profitability	5.0805	1.51794	0.392	2.535
Value_social_health_underprivil	5.1441	1.50050	0.483	2.114
Value_social_care_resources	5.0212	1.49737	0.427	4.208
Value_social_care_education	5.2034	1.49359	0.392	3.098
Value_environ_pollution	4.8136	1.47864	0.487	4.191
Value_environ_energy_restoration	5.0763	4.92610	0.161	3.237
Value_environ_energy_conservation	4.5636	1.44111	0.480	1.163
Value_environ_waste	4.6441	1.38087	0.471	3.450
Value_economic_fairtrade	5.0000	1.46156	0.542	2.870
Value_economic_recycling	5.0508	1.44309	0.500	2.881
Value_economic_profitability	4.9492	1.34858	0.447	3.051



Table 2: List of Hypotheses

<b>Hypotheses No. and Statement</b>		<b>Accept/Reject</b>
H1	An increase in the concern of a brand about health related challenges being faced by the society in which it operates will improve the (1) brand knowledge (2) brand value perceived by its customers.	Accept
H2	An increase in the concern of a brand about the nature related challenges being faced by the society in which it operates will improve the (1) brand knowledge (2) brand value perceived by its customers.	Accept
H3	An increase in the concern of a brand about the education related challenges being faced by the society in which it operates will improve the (1) brand knowledge (2) brand value perceived by its customers.	Accept
H4	An increase in the concern of a brand about pollution related environmental challenges being faced by the society in which it operates will positively influence the (1) brand knowledge (2) brand value perceived by its customers.	Accept
H5	An increase in the concern of a brand about energy conservation related environmental challenges being faced by the society in which it operates will positively influences the (1) brand knowledge (2) brand value perceived by its customers.	Accept
H6	An increase in the concern of a brand about energy conservation related environmental challenges being faced by the society in which it operates will positively influences the (1) brand knowledge (2) brand value perceived by its customers.	Reject
H7	An increase in the concern of a brand about waste management related environmental challenges being faced by the society in which it operates will positively influence the (1) brand knowledge (2) brand value perceived by its customers.	Accept
H8	An increase in the concern of a brand about fair trade related economic challenges being faced by the society in which it operates will positively influence the (1) brand knowledge (2) brand value perceived by its customers.	Accept
H9	An increase in the concern of a brand about product recycling related economic challenges being faced by the society in which it operates will positively influence the (1) brand knowledge (2) brand value perceived by its customers.	Accept
H10	An increase in the concern of a brand about profitability related economic challenges that a business takes to demonstrate its concern for the society will positively influence the (1) brand knowledge (2) brand value perceived by its customers.	Accept
H11	Higher knowledge of customers about sustainability related concerns of the brand will increase their ability to differentiate between brands.	Accept
H12	Higher assessment of customers about value contributed by the brand to sustainability challenges of the society will increase their ability to differentiate between brands.	Accept

Figure 2: Normal Probability Plot

