Relationship between Customer Equity and Customer Loyalty: A Study of Retail Outlets for Consumer Durables

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Abstract
By understanding the customer asset and managing customers as strategic assets, the firm can increase shareholder value. 'Customer Equity' is the overall value of the firm's current customers and the firm's prospective customers.

This implies that marketing investments must be made in customer equity. Return on marketing investments is becoming increasingly important for making decisions. The returns can be assessed in terms of customer loyalty.

Customer Equity is the composite of Value Equity or the value received by the customer against sacrifices made, Relationship Equity or the social and customisation bonds formed between the provider and the customer, and Brand Equity, the additional value endowed on the underlying product by the customer as a consequence of the branding effort.

This research examines the value of investments made in each of the three constituents of Customer Equity from the standpoint of returns in terms of Customer Loyalty in the context of Retail Stores. The study examines the relationship between Customer Equity and each of its three dimensions with Customer Loyalty. The study provides justification in making marketing investments based on potential returns.

The findings have important implications for traditional retailing services under threat from electronic retail formats.

Keywords: Customer Equity, Value Equity, Relationship Equity, Brand Equity, Brand Loyalty

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CUSTOMER EQUITY

Introduction
The ability to acquire, manage and model customer information is a key asset. Marketers are now organising marketing efforts around customers rather than products. The product focussed approach leads to development of brand equity. The customer focussed approach leads to customer equity.

Customer Equity Management is a comprehensive approach which focuses on increasing the lifetime value of the customer by managing customer relationships as a strategic asset.

The customer equity approach to marketing has its roots in service quality, relationship marketing and brand equity. Customer Equity combines the above research streams. The roots of Customer Equity can be found in direct marketing programs where direct marketers assess the value of individual customers and make customer lifetime value assessments.

The limitations of direct marketing have been that it focuses on operational aspects such as communication effectiveness and response rates and has not considered aspects such as product quality, price and customer service to make assessments of the drivers of customer response.

Relationship marketing literature has focused on key elements for developing and sustaining long term relationships, such as trust, commitment and shared values. Research has moved beyond interpersonal models which may not be appropriate in more economically focussed relationships because not all customers are looking for affective commitment. The customer’s interpersonal relationship must be balanced against the profitability of doing so.

The term Customer Equity was initially proposed by Blattberg and Wisniewski (Blattberg & Wisniewski, 1989) as the sum of the lifetime value of all the firm’s customers. This highlighted the importance of understanding the value of the firm’s customer base and evolving appropriate strategies for retention, cross selling and upselling. Rust, Lemon, and Zeithaml (Rust, Lemon, & Zeithaml, 2004) developed a conceptual model to measure the effect of different marketing programs to perpetuate and build customer equity.

The work of Hogan, Lemon and Rust (Hogan, Lemon, & Rust, 2002) suggests that the conventional method of using discounted cash flows is likely to significantly underestimate the value of customers. A growing stream of research shows that by understanding the customer asset and managing customers as strategic assets, the firm can increase shareholder value.

Customer equity is the overall value of the firm’s current customers and the firm’s prospective customers. The contribution of these customers to the firm’s value is moderated by the firm’s customer equity management skills. The firm’s tangible assets and the intangible assets comprising its brand and channel relationships are conditional assets which are useful only to the extent they contribute to customer equity. This implies that marketing investments must be made in customer equity. At the same time, return on marketing investments is becoming increasingly important for making decisions on marketing activities. The returns can be assessed in terms of customer loyalty and customer lifetime value. Marketing investments can be made in product quality, advertising or loyalty programs. Different marketing programs have to be evaluated on their own merit. Equally they must be compared with each other to determine which investment is likely to yield the highest returns. These decisions have been traditionally made by senior marketing executives based on judgment with little data to go by(Rust et al., 2004).
Marketers are increasingly taking a long term view of customer relationships. Marketers think of customers' long term value to the company as opposed to value from individual transactions.

Brand equity is the additional value endowed on the brand by the customer. This is expected to result in a price premium. Customer Equity is the lifetime value of purchases of all the brand’s customers. The purchases refer to purchase of all the products under the brand umbrella.

A model of Customer Equity will include the following stages of achieving customer equity.

The model starts with identification of the primary drivers of customer equity. These drivers could be quality, prices, promotion, relationships and so forth.

The drivers lead to improved customer perception which leads to customer attraction and retention. This leads to increased consumption and lifetime value. This value is compared with marketing investments in the drivers to assess the return on marketing investment.

**Intervention of competing brands:** Customer lifetime value is not a function of the brand’s investments in marketing activities alone. CLV is also a function of marketing activities of competing brands. Customer purchases can flow into competing brands inspite of investments being made in marketing activities of the brand in question.

Customer switching behaviour is variable determining customer equity. If a customer’s activelife is broken up into discrete periods, the probability of a customer migrating from one period to the subsequent period is usually less than 1.0. The further away a period is from the current period, the lower are the chances of retention. At some stage, the customer becomes a non-customer. A variant of this behaviour is when the customer simultaneously purchases multiple brands. The customer may patronise the brand over several periods but spend a fraction of the total budget for the category on the brand in question.

In the current competitive market scenario, it is necessary to monitor customer equity as a key measure of expected future behaviour. Customer equity must be monitored both to detect signals of erosion and to develop appropriate initiatives to enhance it ——(Verena Vogel, Evanschitzky, & Ramaseshan, 2008).

Studies have linked instrumental marketing actions with outcomes such as customer perception, customer behaviour and financial results.

The Customer Equity construct proposed by Rust, Lemon and Zeithaml is a composite of three drivers of customer actions - Value Equity, Relationship Equity and Brand Equity. These drivers impact customer lifetime value and customer loyalty (Anderson, Fornell, & Rust, 1997b).

Traditionally attitudinal surveys are conducted to assess customer value. It is necessary to understand the drivers of customer attitudes to arrive at decisions on how attitudes may be shaped in the most effective manner. The drivers of customer attitudes are Value Equity, Relationship Equity and Brand Equity. An outcome measure of customer equity which has great relevance is the prospect of future sales. While customer loyalty is a broader metric which encompasses future sales along with willingness to pay a price premium and willingness to expand search effort, future sales can serve as an indicator of the consumer behaviour which brands are most interested in cultivating.

The Rust, Lemon, Zeithaml model views customer
equity as a strategic investment objective that drives consumer behaviour. One of the deficiencies of consumer research based on consumers’ stated purchase intentions is that a respondent completing a research questionnaire in a time and place far removed from an actual purchase situation is guided by brand equity alone and is likely to give responses which could vary significantly from actual purchase actions which could be dictated by considerations such as sales promotion, convenience, accessibility, availability, intervention of influences and budgetary constraints. These influencers collectively constitute value equity and relationship equity.

**Customer Equity:** The three constituents of Customer Equity as proposed by Rust et.al. are Value Equity, Relationship Equity and Brand Equity.

**Value Equity:** Value Equity is the foremost driver of customer buying intentions. It is the ratio of the value that the product offers vis-a-vis the sacrifices the customer must make in order to acquire it.

Customers have their own standards of outcome-input ratios where outcome is the expected benefits from usage of the product purchased and input is the sacrifices the customer makes to acquire. This includes cost of search, cost of ownership, cost of disposal, and cost of maintenance in addition to cost of acquisition.

If the product’s outcome-input ratio is favourable vis-a-vis the reference ratio of the customer, a purchase is likely to result. This is subject to outcome-to-input ratio of competing offerings. Value equity works when benchmarked against the customer’s own reference ratios and also against the most favourable competitive offering. Study of sales promotions shows that a price promotion for one brand impacts sales of other brands in the same product category (Guadagni & Little, 1983). Value Equity can therefore be a driver of switching behaviour.

**Relationship Equity:** Customer relationships in mass consumer contexts are influenced by prices and personalised value propositions which are shaped by relationships with service providers in the service marketing context (Richard, 2017). The ability of the marketer to form bonds with the customer beyond the value intrinsically offered by the product is called Relationship Equity. Relationship Equity is formed based on the customer’s familiarity with the brand, the trust enjoyed by the distribution partner or store, employees of the store, whether customers believe they have been treated well, with respect and fairness, whether their grievances have been addressed, and whether they have been helped with information needed to make a purchase decision. Relationship equity offers additional value to the customer.

**Brand Equity:** Brand Equity is the additional value endowed on the brand by the customers reflected in the way the customer feels, thinks and acts towards the brand. Several models have been proposed for the measurement and creation of brand equity (Shocker & Aaker, 1993). Some of the notable models are those proposed by Aaker D., (Aaker, 1991), Keller K.L.(K L Keller, 1993), (Kevin Lane Keller & Lehman, 2006) and the advertising agency, Young and Rubicam.

The Aaker Model suggests that the independent variables awareness, associations (with people, places, events, countries and other brands), perceived quality and loyalty contribute to brand equity.

The Keller model proposes that the independent variables salience, imagery, performance, judgments, feelings and resonance contribute to brand equity. This model has been referred to as the Customer Based Brand Equity Model.

In the context of retailing of consumer products, studies have shown that the customer loyalty depends not only on the brand equity of the product being sold,
but also on the brand equity of the retailer (Leone et al., 2006).

The Young and Rubicam Brand Asset Valuator Model proposes independent variables Differentiation, Energy, Reliance, Esteem and Knowledge as the drivers of brand equity.

**Loyalty and Future Sales:** Loyalty intentions may result in readiness to act. This translates into consumers' willingness to search for a favourite offering regardless of the effort involved in doing so.

Studies have relied on stated loyalty intentions to predict future purchases.

Analysts have taken a series of past retention numbers for a given group of customers and projected them in the future to predict customer tenure and lifetime value (Fader, Hardie, & Fader, 2007). Customer Loyalty can be predicted by using the Recency, Frequency, Monetary Value model which can also be used to predict Customer Lifetime Value (Fader et al., 2007). Those stated intentions may not necessarily translate into actual purchases. Therefore, a stronger metric is actual purchase data. While this study is restricted to customer loyalty, the scope for future study is in the area of actual behaviour reflected in purchase data.

**Review of literature**

Consumer relational benefits can be categorised into three distinct benefit types – confidence benefits, social benefits and special treatment benefits. Of these, confidence benefits are of higher significance relative to the other two benefit categories.

Loyalty programs are useful for customer retention because customers perceive benefits in a long term relationship with a provider. Customers seem to believe that they are not merely receiving value by way of rewards translating in price discounts, but also greater value by way of better quality and service (Bolton, Lemon, & Bramlett, 2006), (Gwinner, Gremler, & Bitner, 1998).

The drivers of customer loyalty intentions are dynamic and undergo changes from the introduction to the growth phases of the customer life cycle. In the introduction phase, customers seek value. In the growth phase, when other competing brands are likely to enter the market, loyalty is driven by brand equity and managing relationships (Johnson, Herrmann, & Huber, 2006).

The model of goal directed behaviour or MGB adds desire (desired outcome) and anticipated positive and negative emotions as drivers of loyalty. The brand’s ability to deliver outcomes sought by the customer and consequent positive emotions or avoidance of negative emotions drive customer loyalty (Srivastava & Rai, 2015).

A study of path data as a predictor of consumer behaviour in the context of retail stores suggests that consumers make choices in a dynamic mode and not according to a set predetermined plan. Consumer decisions are the result of dynamic interactions with the environment, in the present context, the store. A study of spatial paths followed by customers can help retailers plan store layouts and improve value equity in terms of making the time spent at the store more productive (Hui, Fader, Bradlow, 2009).

A key challenge for the marketer is understanding which managerially controlled antecedent is likely to influence consumer loyalty. Relationship is an important antecedent and the metrics to measure customer relationship strength can be customer satisfaction and commitment, confidence benefits and social benefits (Gwinner et al., 1998).

Relationship benefits are positively associated with
satisfaction, loyalty, word of mouth and purchases. Satisfaction is further categorised as overall satisfaction, satisfaction with time and effort and satisfaction with outcomes. Satisfaction and attitudinal loyalty influence share of purchase (SOP) defined as the customer’s purchase of a brand in a specific period of time as a percentage of the value of all purchases of the category (Reynolds & Beatty, 1999).

Customer retention rates and customer share are important metrics in Customer Relationship Management.

Customer share is the ratio of the customer’s purchase of a product category from a given supplier to the customer’s total purchase of that product category. Firms use relationship marketing instruments such as loyalty programs to build close customer relationships enriched by affective commitment. Affective commitment is an outcome of relationship building efforts. It can be defined as the psychological attachment a customer feels towards the supplier which results in the desire to continue a valued relationship. Affective commitment leads to customer retention as well as customer share (Verhoef, 2003).

Customer Share can be impacted by critical incidents which can be negative or positive. Critical incidents induce nonlinearity in customer relationships. When a negative CI occurs, the carry over effect of past customer satisfaction reduces and current attribute satisfaction becomes more important (van Doorn & Verhoef, 2008).

The study of consumer behaviour involves not only the reasons for buying, but also the evaluative factors involved in the purchase decision (Verma & Rojhe, 2018).

Customer Equity Management

Brodie (Brodie, 2002) proposed the concept of marketplace equity which combines the equity derived from brands, customer relationships, channel relationships and any other relationship that may add value to the marketing effort. It is proposed that the composite marketplace equity may be interpreted in financial terms to assess the returns on marketing investments to build the equity (Hogan et al., 2002).

There is considerable evidence that Customer Equity influences customer purchase intentions and hence, it is important to study the drivers of customer equity (V. Vogel, Evanschitzky, & Ramaseshan, 2008).

The question that marketers increasingly need to ask is not whether a marketing program will help attract new customers or whether it will help retain existing customers; the question is whether it will serve to build the firm’s customer equity and whether the customer equity is in line with the return from marketing investment benchmarked by the firm.

The goal of maximising customer equity is balancing acquisition and retention efforts. This serves as the guide to optimising marketing investments. Customer equity can be expressed as a sum of two concurrent net present values; the returns from acquisition spending and the returns from retention spending (Blattberg, Getz, & Thomas, n.d.).

The concept of cross selling to increase customer equity has been widely used. Cross selling is defined as selling products and services that are related to the products already sold to the customer. Selling printers with personal computers is cross selling because the printer enhances the utilisation of the computer. Add on selling is about selling products which have no relationships to the products currently sold. An example could be a fertiliser company selling cell phone connections to its customers or a computer...
company selling telecom products to its computer customer base (Blattberg et al., n.d.).

Financial reporting needs to be future oriented. Such information includes details such as key resources, risks, relationships, performance measures and indicators. Customer measures are crucial for assessing operating performance. Customer measures are more important when customers form the firm's major asset base. Forward looking metrics such as the value of the customer base changes over time. Such information is relevant to investors. External reporting must go beyond short term oriented metrics like current profitability. Investors need to receive data on customer retention, cash flows from customers and the value of the customer base operationalized as customer equity (Wiesel, Skiera, & Villanueva, 2008).

An overwhelming number of CEOs see marketing as a strategic function. They also believe that CMOs do not have sufficient appreciation of the need to demonstrate return on investment from marketing investments. CEOs need marketing to drive maximum value from customer relationships. CEOs want marketing to show financial accountability. Perceived lack of marketing accountability has undermined marketing credibility (Rust et al., 2004).

Extant research though extensive has focussed on product based customer equity. Research in the field of retailing as a service has been mainly in the area of impact of promotions and above-the-line marketing activities on sales. Research on effect of customer equity on sales, customer retention and customer satisfaction in the area of traditional retail has been limited. One of the marketing verticals which are under serious threat are conventional retail outlets facing competition from e-retail organisations. E-Retailers are able to offer a wide assortment of products and brands, often at lower price points and with the convenience of home delivery. On the other hand, e-retail entails performance and financial risk (Sharma & Kurien, 2017). Traditional retail must use this factor to maximise customer acquisition, retention and loyalty. Hence, it is necessary to examine ways of improving customer loyalty and retention in this vertical.

Hypothesis of the Study
This study seeks to establish the link between Customer Equity and Customer Loyalty

Customer Equity measures Value Equity, Relationship Equity and Brand Equity.

Objective of the Study
The objective of the study is to examine the relationship between Customer Equity and Customer Loyalty.

In order to examine the effectiveness of the Customer Equity Model with the target group, the study also includes the following objectives:
1. To examine the relationship between Value Equity and Customer Loyalty
2. To examine the relationship between Relationship Equity and Customer Loyalty
3. To examine the relationship between Brand Equity and Customer Loyalty
4. To examine the relationship between Customer Equity and Customer Loyalty

The study will serve to offer justification to invest towards drivers of customer equity.

Hypotheses
The alternate hypotheses from the objectives were as follows:
H₀₁: There is a relationship between Value Equity (VE) and Customer Loyalty (CL)
**H₀₁:** There is a relationship between Relationship Equity (RE) and Customer Loyalty (CL)

**H₀₂:** There is a relationship between Brand Equity (BE) and Customer Loyalty (CL)

**H₀₃:** There is a relationship between Customer Equity (CE) and Customer Loyalty (CL)

The model under consideration is shown in Figure 1.

![Figure 1: Proposed Model](image)

**Methodology**

The study adopted a cross sectional descriptive research design in order to accomplish the research objectives. The population of the study comprises of retail consumers living primarily in urban and semi-urban areas. The study was conducted among business executives in the age group of 23 to 37 years. The respondents belonged to the middle income group, were in the top quartile in education and were well exposed to media and brands.

The questionnaire was administered to 150 respondents and completed responses were received from 110 respondents.

Scale validated by Verona Vogel, Heiner Evanschitzky and B. Ramaseshan was used for measuring the constructs. The scale was multi-item seven-point Likert scales anchored by 7 = "strongly agree" ("very satisfied," "best value") and 1 = "strongly disagree"

("very unsatisfied," "poorest value"). The scale contained 6 items for value equity, 5 items for relationship equity, 4 items for brand equity and 2 items on customer loyalty. Exploratory factor analysis and correlation analysis we reemployed to analyse the collected data on SPSS 20.

The reliability of the scale was tested through Cronbach’s Alpha, having value of 0.878, hence found satisfactory. The table showing Cronbach’s Alpha if the item was removed had all values above 0.8 indicating none of the items needed to be removed (Appendix Table 1 & 2). The validity of the scale was tested through Factor Analysis. Three factors emerged and the Rotated Factor Matrix had high factor loadings for the factor the scale was expected to measure. No items needed to be removed after factor analysis (Appendix Table 3 & 4).

Regression analysis was attempted using Customer Loyalty as dependent variable and Value Equity, Relationship Equity and Brand Equity as independent variables.

Simple Regression analysis was also attempted using Customer Loyalty as the dependent variable and Customer Equity as the independent variable.

**Sample Selection**

A sample of urban consumers in the age group 23-37 years was selected for the research. It was a non-probability sample based on judgment that the sample represented the demographic profile considered for the research. Respondents were based in three metropolitan cities and eight Tier II cities in India.

**Period of the Study**

The study was conducted during the period February 2018 and April 2018.
Analysis of Data

Correlation analysis was used to understand association between Value Equity, Relationship Equity, Brand Equity, and Customer Equity and Customer Loyalty.

The associations are tabulated in Table 1.

Table 1: Correlations

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Correlation</th>
<th>Sig (2 tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value Equity &amp; Relationship Equity</td>
<td>.446**</td>
<td>0.0000</td>
</tr>
<tr>
<td>Value Equity &amp; Brand Equity</td>
<td>.566**</td>
<td>0.0000</td>
</tr>
<tr>
<td>Value Equity &amp; Customer Equity</td>
<td>.811**</td>
<td>0.0000</td>
</tr>
<tr>
<td>Value Equity &amp; Loyalty</td>
<td>.650**</td>
<td>0.0000</td>
</tr>
<tr>
<td>Relationship Equity &amp; Brand Equity</td>
<td>.329**</td>
<td>0.0000</td>
</tr>
<tr>
<td>Relationship Equity &amp; Customer Equity</td>
<td>.769**</td>
<td>0.0000</td>
</tr>
<tr>
<td>Relationship Equity &amp; Loyalty</td>
<td>.389**</td>
<td>0.0000</td>
</tr>
<tr>
<td>Brand Equity &amp; Customer Equity</td>
<td>.800**</td>
<td>0.0000</td>
</tr>
<tr>
<td>Brand Equity &amp; Loyalty</td>
<td>.584**</td>
<td>0.0000</td>
</tr>
<tr>
<td>Customer Equity &amp; Loyalty</td>
<td>.670**</td>
<td>0.0000</td>
</tr>
</tbody>
</table>

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

As seen in Table 1, all these constructs showed significant correlations among each other. The detailed model is depicted in Figure 2.

Figure 2: Final Model

![Diagram of the model showing relationships between Value Equity, Relationship Equity, Brand Equity, Customer Equity, and Customer Loyalty with significance levels for hypotheses H01, H02, H03, and H04.]
Regression analysis was used to establish the relationship between Customer Loyalty and Value Equity, Relationship Equity and Brand Equity.

The $r$ square value of the relationship between BV and BL was 0.498 indicating that 49.8% of increase/decrease in customer Loyalty is attributed to Value Equity, Relationship Equity and Brand Equity. The relationship was significant at 1% level of significance ($\text{Sig}=0.000$). The beta coefficient for the value equity was 0.676, relationship equity, 0.107 and for Brand equity, 0.369. The beta coefficients for Value Equity and Brand Equity were significant at 1% level of significance ($\text{Sig}=0.000$). The coefficient for relationship equity was not significant. The assumptions of regression were found satisfactory (Table 5, 6 & 7 in the Appendix). Analysis showed that the standardized beta coefficients for Value equity,
Relationship equity and Brand equity were 0.435, 0.092 and 0.308 respectively. The results indicate that Value equity has the highest relationship with customer loyalty, followed by Brand equity; Relationship equity has no or minimal relationship with customer loyalty. The relationship is depicted in Figure 2.

![Figure 3: Final Results](image)

**Conclusion**

The respondents are informed individuals who make decisions based on their own judgments and are not influenced by relationship measures. They are not concerned about receiving higher levels of personal attention and do not require assistance in making a choice. Online shopping is dominated by customers in the age band of 25-34 years (Bhattacharya & Srivastava, 2018). This is an indication of the lower degree of importance given to relationship equity. Their buying patterns are similar to purchases made on e-commerce platforms where relationships are not sought to be built by retailers.

This customer segment is highly driven by the intrinsic value of the purchase and the value of the brand. Hence, the results indicate that Value equity has the highest relationship with customer loyalty, followed by brand equity. Relationship equity has no or minimal relationship with customer loyalty.

The high correlation between Brand Equity of the store and customer loyalty shows that customer perception of the brand being purchased is equally influenced by brand equity of the retail outlet. Marketers of retail products must see the value of the retailer’s brand just as much as they value product brand equity. Traditional retailers must therefore conduct marketing initiatives that build the brand value of the store, going beyond being merely a facilitator of transactions between the producer and the buyer.

The high correlation between Value Equity and Customer Loyalty shows that customers are highly price and value conscious in spite empirical evidence to the contrary. Customers are driven by the value proposition of the product being purchased as much as they are driven by the desire to acquire a product on which they endow additional value. This shows that the additional value endowed on the brand does not necessarily translate into willingness to pay higher prices.

**Applicability and Generalizability**

The findings of the study are applicable to consumers across a wide cross section of geographies. The reason to arrive at this conclusion is that the concept of customer equity rests on three aspects - Value Equity, Relationship Equity and Brand Equity. Each of the three concepts is universally applicable. Consumers seek value in the products they buy regardless of which region in the world they belong to. Similarly, consumers are likely to value relationships irrespective of their regional affiliations. There will be differences within each group based on demographics such as age and education. Consumers across regions are likely to enjoy the same traction for a certain brand within a demographic band defined in terms of age, income and education.

Brand Equity is a brand asset which can be built using several conceptual models. The Aaker model uses strategies such as awareness, associations and perceived quality. The Brand Resonance Model of
Keller speaks of Salience, Judgment, Performance, Feelings and Resonance. The Brand Asset Valuator Model is based on Differentiation, Energy, Relevance, Esteem and Knowledge. These factors as antecedents of brand equity are universal. Therefore, one may conclude that the Customer Equity model is applicable universally.

Whether the Customer Equity model can be generalized across all developing and developed countries is another question to be considered.

The central question here is whether the brand value of the retail outlet plays a significant role in ensuring brand loyalty. In developing countries, retail stores do not generally try to build brand equity beyond building reliability and trust. Hence, the brand equity construct may not be generalizable across developing countries. The brand equity construct is increasingly visible in developed countries. The other two constructs, namely, value equity and relationship equity are likely to be generalizable across developing as well as developed countries.

The source of data used in the research is respondents who are working professionals in middle management positions in large business organisations. As reported earlier, they belong to the age group of 23 to 27 years. The respondents came from three metropolitan cities and eight tier II cities in India. The respondents are well educated and well informed about the products they are buying. The profile of the respondents is comparable to people from that demography in any part of the world in terms of education level, awareness, sophistication and income levels based on purchasing power. The responses can therefore be considered to be generalizable across countries and regions.

References

Most farmers (65.79%) are on a per annum basis. Between Rs 5 – 10 lakhs, and 18% borrow less than Rs 5 lakhs, and 18% borrow less than Rs 5 lakhs. Majority of the farmers (82%) are small farmers.

Table 23: The Results of Mann-Whitney U Test for DOWJONES Index Daily Returns

Table source heading

References

Appendix

Table 1: Reliability Statistics

<table>
<thead>
<tr>
<th>Cronbach’s Alpha</th>
<th>Cronbach’s Alpha Based on Standardized Items</th>
<th>N of Items</th>
</tr>
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<tbody>
<tr>
<td>.878</td>
<td>.882</td>
<td>15</td>
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Table 2: Cronbach’s Alpha if Item Deleted

<table>
<thead>
<tr>
<th>Cronbach’s Alpha if Item Deleted</th>
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<tbody>
<tr>
<td>Value Equity_Customer_Experience</td>
</tr>
<tr>
<td>Value Equity_Quality_Price_ratio_Product</td>
</tr>
<tr>
<td>Value Equity_Quality_Price_ratio_service</td>
</tr>
<tr>
<td>Value Equity_time_spent</td>
</tr>
<tr>
<td>Value Equity_involvement</td>
</tr>
<tr>
<td>Value Equity_attractiveness</td>
</tr>
<tr>
<td>Relationship Equity_exclusiveness</td>
</tr>
<tr>
<td>Relationship Equity_familiarity</td>
</tr>
<tr>
<td>Relationship Equity_outreach</td>
</tr>
<tr>
<td>Relationship Equity_personalised</td>
</tr>
<tr>
<td>Relationship Equity_trust</td>
</tr>
<tr>
<td>Brand Equity_strong</td>
</tr>
<tr>
<td>Brand Equity_attractive</td>
</tr>
<tr>
<td>Brand Equity_unique</td>
</tr>
<tr>
<td>Brand Equity_likable</td>
</tr>
</tbody>
</table>

Table 3: KMO and Bartlett’s Test

<table>
<thead>
<tr>
<th>Kaiser-Meyer-Olkin Measure</th>
<th>.840</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bartlett’s Test of Sphericity</td>
<td>Approx. 781.844</td>
</tr>
<tr>
<td>df</td>
<td>105</td>
</tr>
<tr>
<td>Sig.</td>
<td>.000</td>
</tr>
</tbody>
</table>
Most farmers (65.79%) are on a per annum basis. Between Rs 5 – 10 lakhs, and 18% borrow less than Rs 5 lakhs, and 18% borrow less than Rs 5 lakhs. Majority of the farmers (82%) are small farmers.

Table 4: Rotated Component Matrix

<table>
<thead>
<tr>
<th>Component</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value Equity_Customer_Experience</td>
<td>.608</td>
<td>.327</td>
<td>.291</td>
</tr>
<tr>
<td>Value Equity_Quality_Price_ratio_Product</td>
<td>.562</td>
<td>.128</td>
<td>.143</td>
</tr>
<tr>
<td>Value Equity_Quality_Price_ratio_service</td>
<td>.723</td>
<td>.072</td>
<td>.215</td>
</tr>
<tr>
<td>Value Equity_time_spent</td>
<td>.794</td>
<td>.141</td>
<td>.123</td>
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<tr>
<td>Value Equity_involvement</td>
<td>.786</td>
<td>.132</td>
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<tr>
<td>Value Equity_attractiveness</td>
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<td>Relationship Equity_exclusiveness</td>
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<td>Relationship Equity_familiarity</td>
<td>.064</td>
<td>.895</td>
<td>.051</td>
</tr>
<tr>
<td>Relationship Equity_outreach</td>
<td>.231</td>
<td>.741</td>
<td>-.015</td>
</tr>
<tr>
<td>Relationship Equity_personalised</td>
<td>.148</td>
<td>.881</td>
<td>.003</td>
</tr>
<tr>
<td>Relationship Equity_trust</td>
<td>.106</td>
<td>.546</td>
<td>.394</td>
</tr>
<tr>
<td>Brand Equity_strong</td>
<td>.187</td>
<td>-.111</td>
<td>.818</td>
</tr>
<tr>
<td>Brand Equity_attractive</td>
<td>.139</td>
<td>-.124</td>
<td>.770</td>
</tr>
<tr>
<td>Brand Equity_unique</td>
<td>.110</td>
<td>.330</td>
<td>.732</td>
</tr>
<tr>
<td>Brand Equity_likable</td>
<td>.376</td>
<td>.236</td>
<td>.726</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 5 iterations.

Table 5: Regression Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.706a</td>
<td>.498</td>
<td>.484</td>
<td>.8626</td>
<td>2.162</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Brand Equity, Relationship Equity, Value_Equity
b. Dependent Variable: Loyalty
Table 6: Regression ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>75.371</td>
<td>3</td>
<td>25.124</td>
<td>33.765</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>75.895</td>
<td>102</td>
<td>.744</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>151.267</td>
<td>105</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Brand Equity, Relationship Equity, Value_Equity

b. Dependent Variable: Loyalty

Table 7: Regression Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>95.0% Confidence Interval for B</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Lower Bound</td>
<td>Upper Bound</td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>-.227</td>
<td>.572</td>
<td>-.396</td>
<td>.693</td>
<td>-1.362</td>
<td>.909</td>
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<tr>
<td>Value_Equity</td>
<td>.676</td>
<td>.140</td>
<td>.435</td>
<td>4.810</td>
<td>.000</td>
<td>.397</td>
</tr>
<tr>
<td>Relationship Equity</td>
<td>.107</td>
<td>.091</td>
<td>.092</td>
<td>1.167</td>
<td>.246</td>
<td>-.075</td>
</tr>
<tr>
<td>Brand Equity</td>
<td>.369</td>
<td>.102</td>
<td>.308</td>
<td>3.599</td>
<td>.000</td>
<td>.165</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Loyalty

Amit Bhadra is Dean, Woxsen School of Business, Hyderabad. He earned his BE from NIT Surat, PGDM from IIM Bangalore and Ph.D. from Pacific University, Udaipur. His work experience includes 20 years in industry in leadership roles and ten years in academics. He has conducted several MDPs/consulting assignments for leading companies such as ACC Limited, Ambuja Cements Limited, Asian Paints, USV Limited, Novartis, Borosil, and Western Railways. Dr. Bhadra has published 15 research articles in peer reviewed journals. His areas of interest are Brand Management, IMC, Sales Management and B2B Marketing. He has taught at NMIMS, Mumbai, SPIJMR, Mumbai and IBS Hyderabad. He can be reached at amit.bhadra@woxsen.edu.in

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