CHAPTER IV
RESEARCH METHODOLOGY

4.1 Introduction
The theoretical framework which was developed from literature review comprised of two concepts, internal and external branding, which lead to services brand building. The literature review further identified the relationship between employee satisfaction and internal brand and customer satisfaction and external brand. The positive influence of internal brand and external brand on employee satisfaction and customer satisfaction had been hypothesized. Also hypothesized were the employee perception and customer perception of different types of banks based on ownership, namely private, public sector and foreign banks.

In this study, attitude of employees and customers towards banking services was measured; attitude is an enduring disposition to consistently respond in a given manner to various aspects of the world including persons, events and objects (Zikmund, 2003). Employee satisfaction and customer satisfaction towards banking services were measured as a part of this study. Perceptions of bank employees towards their bank type (whether private, public or foreign) and customers towards their bank type were compared in this study. The theoretical framework required a study of attitudes of both employees and customers towards their service brand, which required two different populations of employees and customers to be considered. As the research problem under consideration has already been studied in varying degrees both by academia and corporates, it was construed that descriptive research design is best suited for the research (Malhotra, 2010).

4.2 Research Design
The study undertook the design of descriptive research and developed the theoretical framework and qualitative research procedures. Descriptive research design describes the characteristics of a population or a phenomenon. Survey method is recommended in descriptive research design
(Zikmund, 2003). Descriptive research design (survey research) was used in this research as this study measured the attitudes and the characteristics of bank employees and customers towards their service brand. Descriptive research design has been found as an appropriate research design for this study as it is designed to describe characteristics of a population or a phenomenon. Diagnostic analysis such as multivariate analysis was performed to arrive at research findings.

4.2.1 Sampling Method

The sampling method used in the study was convenient sampling for both customer and employee data collection.

In case of customer data collection, random sampling of bank customers could not be followed as banks did not provide customer databases. Selecting customers through any other method for random sampling would have been time consuming and costly. Hence convenient sampling was used.

The exact population size of the employees’ sample was not available in public domain. Therefore ensuring random sampling for data collection was beyond control. Hence convenient sampling was used.

4.2.1.1 Boot Strapping & Standard Error Calculation

Boot strapping of the data was done to remove any possibility of error that could have been caused due to convenient sampling. Bootstrapping is a technique from which the sampling distribution of a statistic is estimated by taking repeated samples (with replacement) from the data set (so, in effect treating the data as a population from which smaller samples are taken). The statistic of interest is calculated for each sample (Field, 2003). The standard error of the statistic is estimated as the standard deviation of the sampling distribution formed from the bootstrapped samples. Hence the sample was considered for further data analysis.

The employee data of sample size 778 was divided into four smaller samples using ‘select cases’ option under the menu function termed as ‘data’ in SPSS.12. This was done as the software version used for this study did not include the bootstrapping
module. Sample sizes of 250, 350, 550, and 600 with replacement were formed to check whether these samples and the sample of 778 were similar or not. When the data is divided into smaller sample sizes, the mean of the original sample is considered as populations mean (Field, 2003). The means were calculated for the smaller samples. The standard error was calculated to understand how well the samples represent the population. For the original sample of 778, mean was calculated for all the five dimensions such as corporate brand, reputation, modernity, effective human interface and perceived customer satisfaction. The sampling distribution formed from this sample mean was a symmetric distribution. The central limit theorem also suggest that as samples get large (usually defined as greater than 30) the sampling distribution has a normal distribution with a mean equal to the population mean (Field, 2003).

The accuracy of the population mean was determined by calculating the standard error. The standard error was calculated by taking the difference of the sample means (four samples, in this case) and overall mean, squaring them, adding them up and dividing by number of samples (4, in this case). Standard error was calculated by taking the square root of this value (in other words, standard deviation of sample means is known as standard error).

### Table 1: Standard Error of Sampling Distribution of Employees

<table>
<thead>
<tr>
<th>Variables</th>
<th>Original Sample (SS*=778)</th>
<th>Bootstrap Estimates for Sample Size</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Mean (SS=250)</td>
<td>Mean (SS=350)</td>
</tr>
<tr>
<td>Corporate Brand</td>
<td>2.1</td>
<td>2.15</td>
<td>2.21</td>
</tr>
<tr>
<td>Reputation</td>
<td>2.17</td>
<td>2.33</td>
<td>2.36</td>
</tr>
<tr>
<td>Modernity</td>
<td>1.81</td>
<td>1.78</td>
<td>1.91</td>
</tr>
<tr>
<td>Conflict Handling</td>
<td>1.83</td>
<td>1.92</td>
<td>2.03</td>
</tr>
<tr>
<td>Perceived Customer Satisfaction</td>
<td>1.95</td>
<td>2.03</td>
<td>2.01</td>
</tr>
</tbody>
</table>

*Sample Size
Standard error is a measure of how representative a sample is likely to be of the population (Field, 2003). A small standard error indicates that most sample means are similar to the population mean. In the table given above, it can be seen that the standard error is very small in comparison to the mean. Hence, it can be inferred that this sample is likely to be a reflection of the population.

Similarly, the customer data was also divided into four different smaller samples of 300, 600, 900 and 1200. The standard error was calculated for the sampling distribution for the variables which were studied using the customer data. The standard error for the customer sample is found to be very small in comparison with the sample mean. Hence, it can be inferred that this sample is likely to be a reflection of the population.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Original Sample</th>
<th>Boot strapped Samples</th>
<th>Standard Error</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SS*=1468</td>
<td>SS=300</td>
<td>SS=600</td>
</tr>
<tr>
<td>Brand Name</td>
<td>4.15</td>
<td>4.11</td>
<td>4.08</td>
</tr>
<tr>
<td>Price/Value for Money</td>
<td>4.39</td>
<td>4.4</td>
<td>4.32</td>
</tr>
<tr>
<td>Core Service</td>
<td>4.77</td>
<td>4.8</td>
<td>4.67</td>
</tr>
<tr>
<td>Employee Service</td>
<td>4.47</td>
<td>4.47</td>
<td>4.38</td>
</tr>
<tr>
<td>Servicesscape</td>
<td>4.80</td>
<td>4.84</td>
<td>4.7</td>
</tr>
<tr>
<td>Feelings</td>
<td>4.03</td>
<td>4.05</td>
<td>4.02</td>
</tr>
<tr>
<td>Self-image Congruence</td>
<td>4.06</td>
<td>4.05</td>
<td>4.02</td>
</tr>
<tr>
<td>Controlled Communications</td>
<td>4.30</td>
<td>4.31</td>
<td>4.27</td>
</tr>
<tr>
<td>Uncontrolled Communications</td>
<td>4.23</td>
<td>4.27</td>
<td>4.17</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>4.56</td>
<td>4.57</td>
<td>4.49</td>
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<tr>
<td>Brand Attitude</td>
<td>4.59</td>
<td>4.67</td>
<td>4.44</td>
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<tr>
<td>Brand Verdict</td>
<td>4.52</td>
<td>4.57</td>
<td>4.43</td>
</tr>
</tbody>
</table>

*Sample Size

The influence of internal and external brand dimensions on employee satisfaction and customer brand verdict were hypothesized and tested using the data collected. The
study also compared the private, public and foreign banks based on employee perception and customer perception towards the bank brands.

The theoretical framework of the study proposed the influence of internal and external brand on the service brand. Positive influence of internal brand on customer satisfaction was hypothesized as H1. Positive influence of external brand on brand verdict was hypothesized as H2.

Hypothesis H3 was framed to test whether bank type (public, private or foreign) is a good predictor of employee satisfaction.

Hypothesis H4 proposed to test whether the perception of employees of public, foreign or private sector banks differ significantly from each other towards their internal brands.

Hypothesis H5 was framed to test whether there is any significant difference among the different demographic groups of customers’ towards their overall brand verdict of their banks.

4.3 Scale Development

The scale development method used in the study was based on Churchill’s (1979) paradigm and subsequent scaling literature (DeVellis, 1991; Netemeyer et al., 2003). The first step was to define the constructs of the study which were internal brand, external brand and service brand by identifying the dimensions which formulate these constructs. A pool of items were generated which measured the dimensions under the study. These items were later subjected to an expert panel which led to the pruning of the number of items in the scale.

In the second stage, pilot studies were conducted for both internal and external brand measurement scales.

In the third stage, as suggested by Churchill (1979), Cronbach’s Alpha and exploratory factor analysis was used to check the reliability and validity of the data.
The reliability and validity tests are reported in the next chapter on “Data Analysis”. As the scale for the external brand measurement was adapted from literature, the validity and reliability was tested and confirmed to be similar. A brief write up on both the scales are given below:

4.3.1 Internal Brand Measurement Scale

The study required clarity for the measurement of the theoretical framework proposed. Most of the Indian studies conducted in the banking area focused on service quality and related dimensions such as loyalty and relationship banking (Natarajan et al., 2010; Saravanan and Rao, 2006; Rai, 2009). Hence few in-depth interviews were conducted with heads of corporate branding or marketing function / senior bank executives as well as bank employees to understand their perspective on bank branding. The profiles of the executives included Ms. Tina Singh, Head - Corporate Branding, ICICI Bank; Mr. Karthi Marshan, Chief Marketing Officer, Kotak Mahindra Bank; Mr. Tuhin Ranjan, Asst. Vice President, Market Research, H.S.B.C Bank and Mr. Dhavle, Chief Manager, Marketing from Indian Bank and 3 other bank employees at the middle level. In total, 7 bank executives were interviewed and their comments were documented. The experts agreed that the dimensions identified in the study were relevant.

The in-depth interviews led to the understanding that employees consider the organization or their corporate brand as central to their satisfaction and brand perception. Bank employees were probed on their understanding and evaluation of their organizations’ internal brand by posing questions such as their pride in associating with the bank they are working for, their opinions on the strong and weak areas of the bank, on the organizational culture, opportunities for self developmental activities etc.. Special care was taken in identifying the dimensions, which constitute the service brand dimensions.
Scale development was based on the findings which emerged from these interviews and available literature as explained in the previous chapter on “Theoretical Framework”. This method was helpful in achieving a general insight into bank branding apart from the insights received through extensive literature review (Dall'Olmo Riley and de Chernatony, 2000; Mitchell, 2002, Aurand et al, 2005).

A five point scale was used as it can lead to a well defined five answer groups where 1 indicated ‘excellent’, 2-good, 3-average, 4-poor and 5-worst. The scale was developed and tested for the first time and hence did not use 7 point or 10 point scale as it would have brought too much variation between the responses (Zikmund, 2003).

The scale was tested for reliability and validity by conducting a pilot study. The reliability and validity measurement of the scale is reported in the next chapter on data analysis.

**4.3.2 External Brand Measurement Scale**

Scale for the measurement of external branding is based on a study of customer perception of the brand and was adapted from literature (Berry, 2000; Keller, 2003; Grace & O’Cass, 2006). The dimensions and variables which measure the external branding have been discussed in the previous chapter on “Theoretical Framework.” The suitability of the scale was checked preliminarily by conducting a focus group discussion. The participants of the focus group discussion represented customers from different segments so as to understand their expectations from a bank and the problems they had with their current banks. This procedure assisted in concluding the dimensions on which customer based brand equity is constructed. The scale was adapted as findings of the focus group discussion revealed similar dimensions for building a banking services brand. Construct validity was confirmed by using the exploratory factor analysis. Scale reliability was confirmed through the measurement of Coefficient Alpha (Cronbach, 1951). The scale was tested further for reliability and validity by conducting a pilot study. Since the results were favorable, it was decided to adapt the scale for this study.
4.4 Final Questionnaire Design

The questionnaires had three different parts. Part I addressed the respondent and provided a brief on the study and explained the scale.

For the internal brand questionnaire, a five point Likert scale was used where a rating of 1 described that bank as “best” in that parameter and a rating of 5 described it as “worst” in that parameter. The ratings in-between ranged from good to average to bad.

For the external brand measurement scale, a 7 point Likert scale was used where statements were measured on a scale of “strongly disagree” to “strongly agree” where the former had a score of 1 and the latter, a score of 7.

The second section of the questionnaire consisted of statements which measured dimensions of the theoretical framework of the study.

The third part of the questionnaire was allocated to the collection of demographic data of the respondents.

The next section deals with the statements pooled under each of the dimensions of the study.

4.4.1 Internal Brand Measurement: Dimensions and Statements.

The bank employees were asked to rate their bank as the best, good, average, bad, worst on a scale of 1 to 5.

4.4.1.1 Corporate Brand

1. The top management’s vision
2. The work culture
3. The profit generated
4. Quality of Advertisements
5. Market Research
6. Innovativeness
7. Growth opportunities for employees
8. Branch Ambience
9. The number of branches

4.4.1.2 Reputation
1. Image
2. The visibility
3. Reputation
4. Social activities

4.4.1.3 Modernity of the bank
1. Technology used
2. Being modern
3. Online banking
4. Tele banking
5. Mobile banking

4.4.1.4 Effective human interface
1. Conflict handling
2. Courteous Staff

4.4.1.5 Customer satisfaction
1. Speed of transaction
2. Customer Satisfaction
4.4.2 External Brand Measurement Scale: Dimensions and Statements

The customers of the banks were asked to specify whether they strongly agree or disagree on the following statements about their banks where 1 indicated “strongly disagree” and 7 indicated “strongly agree”

4.4.2.1 Brand Name

1. The brand name of this bank tells me a lot about what to expect from this bank.
2. The brand name of this bank tells me a lot about this bank.
3. The brand name of this bank means something to me.
4. The brand name of this bank sends a message to me about the bank.
5. The brand name of this bank tells me everything I need to know about its service.

4.4.2.2 Price/value for money

1. This bank’s services are reasonably priced.
2. This bank offers value for money.
3. This bank provides a good service for the price.
4. Using this bank is economical.

4.4.2.3 Servicescape

1. This bank has up-to-date facilities.
2. This bank’s physical facilities are visually attractive.
3. This bank’s employees have a neat and well dressed appearance.
4. The appearance of the physical facilities of this bank is in keeping with the type of service provided.

4.4.2.4 Core service

1. The core service provided by this bank suits my needs.
2. The core service provided by this bank is reliable.
3. I can depend on this bank to provide good core service.
4. This bank provides quality core service.
5. The core service provided by this bank is superior.

4.4.2.5 Employee service
1. I receive prompt attention from this bank’s employees.
2. Employees of this bank are always willing to help me.
3. The employees of this bank are never too busy to respond to my requests.
4. I can trust the employees of this bank.
5. I feel safe in my transactions with this bank’s employees.
6. Employees of this bank are polite.
7. Employees of this bank give me personal attention.

4.4.2.6 Feelings
When using this bank I feel
1. Annoyed
2. Happy
3. Irritated
4. Frustrated
5. Pleased
6. Sad
7. Disgusted
9. Uneasy
10. Good
11. Nervous
12. Confident
13. Impressed

Note: The negative feelings were reverse coded.
4.4.2.7 Self-image Congruence

1. The image of this bank is consistent with my own self-image.
2. Using this bank reflects who I am.
3. People similar to me use this bank.
4. The kind of person who typically uses this bank is very much like me.

4.4.2.8 Controlled Communications

1. I like the advertising and promotions of this bank.
2. I react favorably to the advertising and promotions of this bank.
3. I feel positive toward the advertising and promotions of this bank.
4. The advertising and promotions of this bank are good.
5. The advertising and promotions of this bank do a good job.
6. I am happy with the advertising and promotions of this bank.

4.4.2.9 Uncontrolled Communications

1. Publicity about this bank has been significant in affecting my views of this bank.
2. Publicity about this bank revealed some things I had not considered about this bank.
3. Publicity about this bank provided some different ideas regarding this bank.
4. Publicity about this bank really helped me formulate my ideas about this bank.
5. Publicity about this bank influenced my evaluation of this bank.
6. The opinion of my friends/family has been significant in affecting my views of this bank.
7. My friends/family mentioned some things I had not considered about this bank.
8. My friends/family provided some different ideas regarding this bank.
9. My friends/family really helped me formulate my ideas about this bank.
10. My friends/family influenced my evaluation of this bank.

4.4.2.10 Satisfaction

1. I am very satisfied with the service provided by this bank.
2. This bank does a good job of satisfying my needs.
3. The service provided by this bank is very satisfactory.
4. I believe that using this bank is usually a very satisfying experience.
5. I made the right decision when I decided to use this bank.

4.4.2.11 Brand attitude

1. Overall I think this bank is very good.
2. Overall I think this is a nice bank.
3. Overall I think this bank is very attractive.
4. Overall I think this bank is desirable.
5. Overall I think this bank is extremely likeable.

4.4.2.12 Brand verdict

1. I am likely to use this bank in the future.
2. I will probably use this bank in the future.
3. I will possibly use this bank in the future.
4. I have every intention of using this bank in the future.

4.4.3 Pretesting and Validation
Pretest of the questionnaires in a controlled setting was done to ascertain the duration for filling the questionnaires and to understand whether the statements in the questionnaire were comprehensible by the average respondent. From the pretesting it was understood that the internal brand measurement scale will take around 10 minutes to complete and the external brand measurement scale will take about 10-15 minutes to complete. There were no issues on the comprehensibility of the statements.

4.5 Data Collection
Details about data collection for customers and employees are given below:

4.5.1 Customer Data Collection

The targeted sample size was 1500. 1800 questionnaires were distributed through personal contacts. 1532 filled questionnaires were collected from bank customers of which 1468 were usable. This sample size is considered ‘robust’ (Nunnely, 1978 as cited in Hinkin, 1985). Sample distribution for customers of different banks is given in Table 3.

1800 questionnaires were distributed through personal contacts. The targeted sample size was 1500. Permission of the Director of K. J. Somaiya Institute of Management Studies & Research was taken to use student volunteers to collect data from the different Metros, as the autonomous courses have a good representation of students from these geographic regions. Data collection was done by students when they visited their natives during term breaks. Student volunteers and personal contacts were personally briefed by the researcher about the survey objectives and the dimensions. The researcher also personally collected data from Mumbai by meeting respondents.

The data from Indore was collected during a management development program, where the participants were from Indore. Personal contacts were used to collect data from Kerala and Tamilnadu. Questionnaires were distributed to the respondents after
they were briefed about the study. The data was collected from the Metros such as Mumbai, Delhi, Kolkata and Chennai as these cities are cosmopolitan by nature to ensure a fairly good national representation. Data was also collected from small and medium towns in Tamil Nadu, Kerala and Madhya Pradesh. The reason for collecting such a sample size was to get a representative sample which consists of all types of customers across all Socio Economic Classes (SEC) from all over India. The sample consisted of customers from different age groups, income and education.

The sample consisted of 1468 customers from different parts of India from 26 different banks operating in the country. 38% of the respondents were females and the rest were males. The respondents’ age belonged to all age groups above 18 years of age. 1.1% of the respondent belonged to the age group of 18-20, 61.7% belonged to the age group of 20-29, 3.3% belonged to the age group of 30-39, 9.4% belonged to 40-49, 12.2% belonged to 50-59 and .6% belonged to the age group above 60. The representations of the age group 30-39 and 60 and above were underrepresented in the sample because of convenient sampling.

49% of the respondents were graduates. 25.7% were post graduates, 7.2% held professional qualifications, and 5.1% had finished 12th standard. 29.8% of the respondents were employed, whereas the rest were self employed or house wives. 42.5% of the respondents had family annual income below Rs. 4 lacs, 26.4% of the population had family annual income between Rs. 4 lacs to Rs.8 lacs, 11.1% had family annual income between Rs. 8 lakhs to Rs. 15 lakhs, 9.4% of the respondents had family annual income between Rs. 15 lakhs to Rs. 50 lakhs, and 06% had annual income above Rs. 50 lakhs. 52.6% of the respondents were customers of private banks, 43.1% of the respondents were customers of public sector banks and 4.4% of the respondents used the services of foreign banks.
Table 3: Customer Sample Distribution

<table>
<thead>
<tr>
<th>Bank Classification</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private banks</td>
<td>772</td>
</tr>
<tr>
<td>Public sector banks</td>
<td>631</td>
</tr>
<tr>
<td>Foreign banks</td>
<td>115</td>
</tr>
<tr>
<td>Total</td>
<td>1468</td>
</tr>
</tbody>
</table>

Care was taken to collect data from four metros through convenient sampling. As the questionnaires were prepared in English, only customers who were expected to be fluent in English were approached for response.

4.5.2 Employee Data Collection

The researcher briefed the marketing/branch heads personally before the data collection. The exact population size of the employees’ sample was not available as exact data of number of employees of banks were not available in public domain. The bank executives were briefed about the survey objectives in the covering letter and emails. In certain other banks, branch heads were briefed about the study and data was collected by distributing questionnaires. Ensuring random sampling in data collection was beyond control, however, as mails were sent to employees. Sample consisted of different age groups with higher representation from age groups 20-29 (44.6 %) and 30-39 (43.1%). 11.4% of the sample consisted of employees belonging to 40-49 and only included 0.9 % from the age group of 50 and above.
The sample consisted of employees who were graduates, post graduates and professionals across different levels including junior staff, officers, managers, general managers and top executives. 374 respondents belonged to private banks, 159 to public sector banks and 245 to foreign banks.

As the study demanded a combination of private sector, public sector and foreign banks, three banks were selected from each sector. In the private sector, ICICI Bank, HDFC Bank and Kotak Mahindra Bank were selected. This choice was based on the logic that ICICI Bank is a very well known brand with decent market share in the banking space, HDFC bank is a brand with comparable market share and brand reputation and Kotak Mahindra bank is relatively new to the banking sector in comparison with the other two.

Among the public sector banks, State Bank of India (SBI), Andhra Bank and Oriental Bank of Commerce were chosen. SBI is the largest bank in India in revenues and holds a huge market share. Andhra Bank, has a more regional flavor but has branches all over the country. Oriental Bank of Commerce has revenues and market share lesser than both SBI and Andhra Bank. These three were picked for this study, as they seemed to fairly represent the public sector banks.

In the foreign banks category, Standard Chartered bank, HSBC bank and Oman International Bank were selected. Standard Chartered Bank has a wide network in India and is considered as a very familiar brand in India among foreign banks. HSBC bank has been very active in the Indian banking sector in the last couple of years. Oman International Bank is a foreign bank with just two branches in India. These three banks were chosen as they are a combination of a very strong brand, a medium brand and a relatively unknown brand.

Responses from 778 bank employees were collected from 9 different banks. 112 questionnaires were collected physically while the rest 665 questionnaires were collected through emails and as data dumps (data collected in excel sheet format) from banks. The targeted sample size was 900 but only 778 were found to be usable as the rest were incomplete. As specified for the customer data in the earlier section
such large sample size was considered ‘robust’ by Nunnelly (1978) as cited by Hinikin (1985).

### Table 4: Employee Sample Distribution

<table>
<thead>
<tr>
<th>Ownership type of banks</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private sector</td>
<td>374</td>
</tr>
<tr>
<td>Public sector</td>
<td>159</td>
</tr>
<tr>
<td>Foreign banks</td>
<td>245</td>
</tr>
<tr>
<td>Total</td>
<td>778</td>
</tr>
</tbody>
</table>

The filled-in questionnaires were scrutinized and incomplete questionnaires were rejected. Later, the questionnaires were numbered and the variables were coded. The data collected was entered into an SPSS file. SPSS.12 version was used to analyze the data. MS Excel was used to draw graphs.

### 4.6 Statistical Analysis Techniques

Suitable statistical analysis tools were used to analyse the data. Depending on the nature of the variables and the objectives of the study, univariate, bivariate and multivariate analyses were used.

#### 4.6.1 Univariate Analysis

Univariate analysis refers to the analyses in which there is a single variable. In this study, univariate analyses were used for identifying the descriptive characteristics of the data. The categories of banks, age, gender, occupation, and education and income levels of respondents were identified by using univariate analyses on data.
4.6.2 Bivariate Analysis

Bivariate analysis involves the simultaneous analysis of two variables where the intention is to study the relationship between two variables. Correlation and ANOVA (Analysis of Variance) and Chi-square tests are the bivariate analyses which were used in this study. Correlation measures whether two variables are varying together or not. In this study, correlation was used to test the sub hypotheses of H1 and H2, where the positive association between the independent and dependent variable were tested. Chi-square test was used to test whether ownership of bank is a good predictor of employee satisfaction which was the third hypotheses of this study. ANOVA is used to compare the means of more than two samples. In this study ANOVA was used to test the hypotheses H4 and H5. These hypotheses tested whether the perception of employees and customers are similar or different across the three types of banks, that is private sector, public sector and foreign banks.

4.6.3 Multivariate Analysis

Multivariate analyses are used when there are more than one independent or dependent variables. In this study, the multivariate analyses used were factor analysis, multiple regression and discriminant analysis. Factor analysis is a multivariate technique for identifying whether the correlation between a set of observed variables stem from their relationship to one or more latent variables in the data, each of which takes the form of a linear model. In this study, factor analysis was used to test the construct validity of the internal brand measurement scale. Multiple regression is an extension of simple regression in which an outcome is predicted by a linear combination of two or more predictor variables. In our study, hypotheses H1 and H2 were tested using multiple regression. This test is included under multivariate analysis here as it measures the effect of more than one independent variables on the dependent variable. Discriminant analysis identifies and describes the discriminant function variates of a set of variables. This analysis was conducted to bring out a brand positioning map for the internal brand data.
4.7 Ethical Consideration

Ethical consideration involving issues of harm, consent, deception, privacy and the confidentiality of data were recognized. While collecting data, the respondents were briefed on the intention of the study and its purpose as an academic study. No participant was coerced to answer questions which were not comfortable for answering. In keeping with the ethical guidelines, the participants’ individual names and addresses were not used in the study.