*Chapter 4*

# Research Methodology

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## 4.1 Introduction

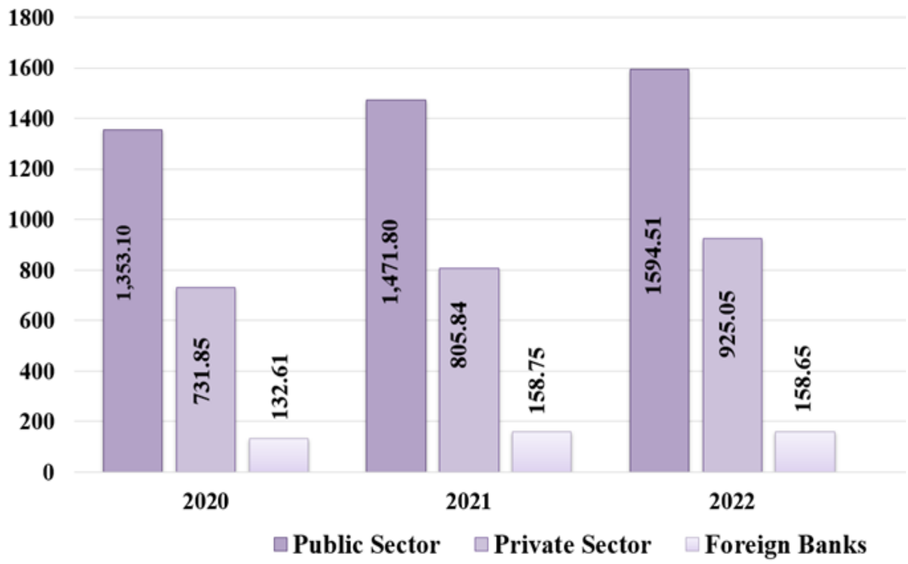
Banks strive to obtain a competitive edge in an environment of intense competition by understanding and adhering to the demands of their customers. This entails not only driving in prospective customers but also keeping existing ones and nurturing lasting relationships. In order to accomplish this, banks need to understand more about the decision-making processes and intentions of customers after using the bank's products and services. Further, it has been acknowledged that long-lasting relationships with customers and brands have been associated with higher market share, revenue, and other intangible benefits for bank brands. Hence, the banks strive to establish a long-lasting relationship with their customers to enhance their customer base by fulfilling their diverse requirements and aspirations. The most effective strategy for developing and safeguarding competitive advantage was the establishment of brand differentiation. Further, these distinguishing features of the bank brand would serve as an indicator of expectation fulfilment for customers, giving them additional assurance and confidence that the brand performs up to their expectations. Therefore, commercial banks in Kerala employ various brand building practices to reinforce their confidence. Therefore, the present study assesses the significance of brand building practices and their contribution towards a bank's achievement of unique positioning, brand equity, and acceptance among customers.

## 4.2 Research Problem

Financial institutions are the key drivers of economic growth and ensure economic stability in the country. It also promotes financial inclusion, which takes care of the financial requirements of the underprivileged, ensuring the sustainable growth of an economy. It helps in maintaining a healthy economy as it ensures liquidity and a free flow of finance to support various economic activities. Among different financial institutions, the banking sector significantly contributes to the growth of the global economy by providing a range of financial products and services. Further, stable banks facilitate the flow of money to economically productive sectors, ensuring the optimal deployment of financial resources. Through pooling funds, banks aid in capital formation, asset creation, growth, and economic stability. Further, by engaging in financing and investing operations, banks significantly contribute to the creation of assets for the economy. Similarly, a banking industry that is well capitalised with total assets and has robust governance policies serves as an armoury against possible shocks and financial instabilities. It strengthens the financial system's resilience, minimising the possibility of bank collapses and systemic crises, which may have extremely detrimental effects on the economy.

**Figure 4.1**

**Commercial Banking Sector Assets in India (US $ billion)**




Source : www.ibef.org

The above figure points out that there has been steady growth in the asset creation of commercial banks in India for the past three years. This confirms the fact that the total asset value determines the ability of the banks to meet the financial requirements of the economy. If banks lack enough asset value, the chances of financial crises are high, which may have negative effects on the growth of the economy. As such, banking instability may result in credit crunches, stock market crashes, and upheavals in the economy. Further, any setbacks or failures in financial institutions or banks would weaken the economy, which hinders development. The significance of financial institutions for an economy was much more evident when the world faced a global recession in 2008 with the collapse of major financial institutions in the USA. It spread the turmoil in the financial sectors globally, leading to an economic crisis and slowdown globally. It also resulted in the failure of many commercial banks worldwide, which shed light on the fact that, globally, banks were not governed by strict policies and regulatory frameworks. Though the Indian economy exhibited a slowdown in its growth pace during the global financial crisis in 2008, robust policies and regulatory frameworks adopted by the RBI over the years mitigated the effects of the recession in India. This brings out the fact that banks play a major role in the economic development of a country.

The banking industry in India is highly competitive, and Indian customers have an extensive choice of banking service providers in the market. Due to the intense competition in the banking industry, the focus of the banks has shifted from merely providing financial products to adopting customer-centric approaches and enhancing the customer experience. Further, by offering individualised services, customised products, and easy banking methods, banks have to create distinctiveness to set themselves apart and withstand the competition. Furthermore, they have to realise that they need to go beyond conventional banking services and provide distinctive value propositions to draw in and maintain customers. Banks differentiate themselves from their rivals by developing a compelling value offer by comprehending and satisfying the changing demands and preferences of their customers. Considering Kerala, which is one of the most economically developed states in India and has remarkable levels of social indicators and human development, banks have to differentiate to create a unique position in the minds of potential customers. Further, the state's strong commitment to healthcare and education has helped it achieve high literacy rates and a higher standard of living. Kerala has one of the highest rates of literacy in India, which has resulted in a workforce that is highly educated and skilled. The state's economic development and expansion have been significantly influenced by this educated population. Moreover, the state's economy has significant representation in the agricultural, manufacturing, and service sectors. In fact, Kerala's banking industry makes a substantial contribution to the growth of the state's economy. Further, banking sector in Kerala contributes to the growth of financial inclusion by providing banking services to a variety of customers, including in rural and remote areas. This contributes to general growth and stability in the economy as well as bridging the gap between various societal sectors. Kerala has a strong banking industry that is essential to sustaining diverse economic activities and fostering growth.

According to the State Level Bankers Committee Kerala Report, there were 7622 branches operating as of September 30, 2022, in Kerala, including 12 public sector banks, 20 private sector banks, 7 foreign banks, 1 regional rural bank, 2 small finance banks, district cooperative banks, KSCARDB, and KSCB. The growth performance in terms of the total business of commercial banks that operate in Kerala is worth mentioning. The main challenge faced by the banks was to create differentiation in the services offered by them, as services can be easily copied by their competitors. For banks to differentiate themselves from other financial institutions and attract customers, uniqueness is essential. To accomplish this, they need to develop distinctive value propositions that set their products apart from those of competing institutions. Banks acknowledge and highlight the need to develop a good brand image to showcase their unique selling points. Thus, branding becomes crucial for service differentiation. Additionally, banks spend resources on brand building initiatives to spread awareness and showcase their USPs. Through these efforts, the target customer is intended to be informed about the bank's values, advantages, and strengths. Therefore, it is essential that banks need to create a distinct brand identity so that customers can recognise each service provider and promote their businesses. Further, banks enhanced their brand image by proactively creating messaging and images that connect with customers and leave an appealing and lasting impression.

**Table 4.1**
**Advertisement and Publicity Expenditure of Scheduled Commercial Banks in India**

| **Banks** | **Years** | | | | | | | | **Amount in Crores** | |
|---|---|---|---|---|---|---|---|---|---|---|
| | **2022** | **2021** | **2020** | **2019** | **2018** | **2017** | **2016** | **2015** | **2014** | **2013** |
| **Public Sector Banks** | 809.74 | 526.92 | 772.68 | 732.36 | 811.59 | 903.56 | 881.24 | 959.46 | 979.57 | 991.37 |
| **Private Sector Banks** | 1870.83 | 1215.94 | 1665.8 | 1435.47 | 1159.5 | 978.42 | 911.54 | 778.66 | 704.04 | 727.1 |
| **Foreign Banks** | 789.75 | 612.14 | 1201.94 | 992.72 | 850.29 | 758.6 | 646.39 | 631.65 | 750.77 | 756.4 |
| **Small Finance Banks** | 156 | 70.30 | 102.03 | 89.1 | 35.22 | 4.96 | | | | |
| **Payments Banks** | 123.98 | 13.73 | 3.47 | | | | | | | |
| **Total** | 3750.29 | 2439.03 | 3745.92 | 3249.64 | 2856.6 | 2645.53 | 2439.17 | 2369.78 | 2434.39 | 2474.87 |

*Source: www.rbi.org.in*

Scheduled commercial banks in India spend a lot of money to differentiate themselves in the highly competitive banking sector. The main motive behind this investment was to create a strong and distinctive brand, which was essential for attracting and retaining customers. Effective brand building practices were crucial since the bank's management sometimes found it difficult to understand precisely what the customers wanted. Therefore, understanding the importance of brand building practices in the banking sector is crucial since a good brand establishes credibility and trust with customers. As banks are entrusted with customers' hard-earned income and financial well-being, they need to know that their bank is dependable and trustworthy. A strong brand engenders trust in potential customers by communicating the bank's principles, dedication to customer satisfaction, and trustworthiness. Therefore, it is necessary to evaluate the extent to which brand building practices have helped a bank to achieve distinctive positioning, brand equity, and customer acceptability. Most of the research found in the literature concentrated on a few aspects of branding and was focused only on limited dimensions of brand building, and few works examined the outcome of brand building practices on customer behavioural intentions. The study also tried to examine the mediating effect of customer-based brand equity and customer satisfaction and the moderating effect of different sectors of banks.

## 4.3 Research Questions

- RQ1 How do customers perceive the brand building practices adopted by their bank brand?
- RQ2 Whether the banks are able to achieve customer-based brand equity, customer satisfaction, and favourable behavioural actions among their customers?
- RQ3 Does the interrelationship of brand building practices influence customer-based brand equity, customer satisfaction, and behavioural intentions?
- RQ4 Does customer satisfaction mediate the relationship between customer-based brand equity and behavioural intentions?
- RQ5 Whether the mediating role of customer-based brand equity factors and the moderating effect of the type of banks in relation to brand building practices influence the behavioural intentions of the customers?

## 4.4 Objectives of the Study

- To investigate the customer perception of brand building practices adopted by commercial banks in Kerala.
- To assess the level of customer-based brand equity, customer satisfaction, and behavioural intentions of the customers of commercial banks in Kerala.
- To explore the interrelationship among brand building practices, customer-based brand equity, customer satisfaction, and behavioural intentions of customers of commercial banks in Kerala.
- To evaluate the mediating role of customer satisfaction in relation to customer-based brand equity and the behavioural intentions of the customers.

- To examine the mediating role of customer-based brand equity factors and the moderating effect of the type of banks in relation to the brand building practices of the commercial banks in Kerala and the behavioural intentions of customers.

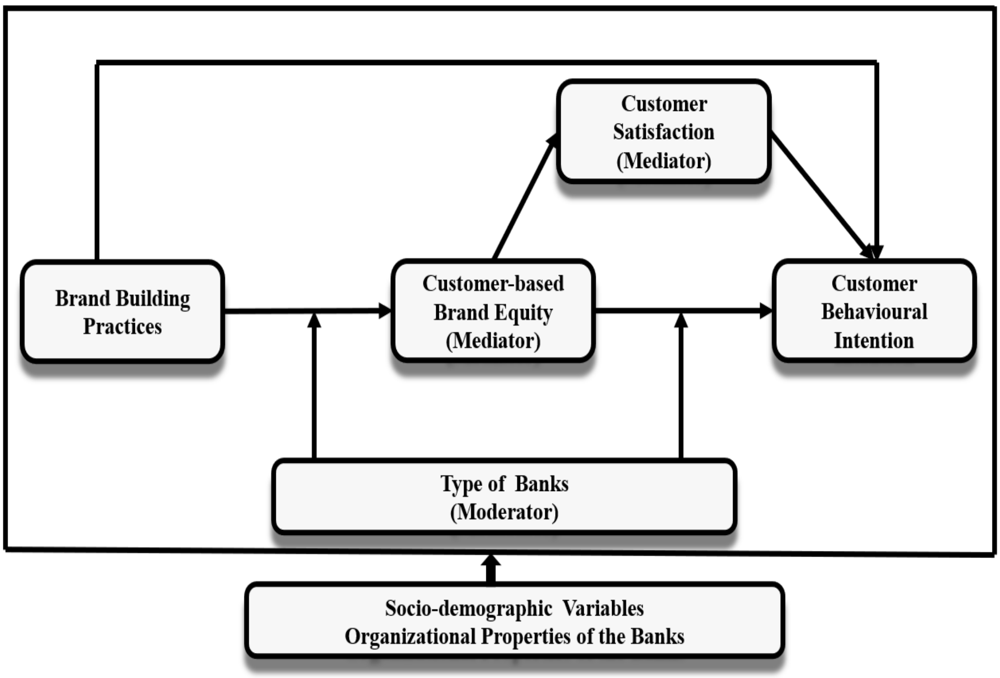
## 4.5 Major Hypotheses of the Study

- **$H_0$**. There exist no significant differences among the levels of brand building practices offered by the commercial banks in Kerala.
- **$H_0$**. There exist no significant differences across various socio-demographic variables of customers and organisational properties of commercial banks in Kerala regarding their perception of brand building practices.
- **$H_0$**. There exist no significant differences among the levels of factors of customer-based brand equity among commercial banks in Kerala.
- **$H_0$**. There exist no significant differences across socio-demographic variables of the customers and organisational properties of the commercial banks in Kerala with respect to their perception of factors of customer-based brand equity.
- **$H_0$**. There exist no significant differences in satisfaction levels and behavioural intentions among customers of commercial banks in Kerala.
- **$H_1$**. Brand building practices of the commercial banks in Kerala have a positive effect on customer-based brand equity
- **$H_1$**. Customer-based brand equity has a positive effect on customer satisfaction.
- **$H_1$**. Customer satisfaction has a positive effect on behavioural intentions.
- **$H_1$**. Customer satisfaction has a mediating role in relation to customer-based brand equity and behavioural intentions.
- **$H_1$**. Customer-based brand equity factors have a mediating role in the relationship between brand building practices and behavioural intentions, and the type of banks moderates this relationship.

## 4.6 Conceptual Framework of the Study

For the present study, an effort is made to relate the concepts to a theoretically coherent and logical framework that justifies and rationally supports them. The conceptual framework presented here was indented to express its rationale for evaluating the brand building practices adopted by the commercial banks in Kerala. Three fundamental concepts were kept in mind while creating the framework for evaluation. First, the brand building practices have the potential to develop customer-based brand equity, which influences customer behaviour favourably. Second, the strong customer-based brand equity of the commercial banks in Kerala promotes customer satisfaction, which in turn encourages customers to make repeat purchases and recommend them to their friends and relatives. Third, different type of commercial banks moderates the relationship between customer-based brand equity and behavioural intentions. The present conceptual framework offers a comprehensive model that illustrates how brand building practices, brand equity, and customer satisfaction influence customer behaviour by considering context specificity.

**Figure 4.2**
**Conceptual Framework**



## 4.7 Scope of the Study

Effective branding has a strategic value that has been highlighted by firms' resilience in today's dynamic and competitive environment. Strong brands increase revenue, market share, and customer loyalty. However, due to the peculiarities of services, brands in financial services are more complicated. Therefore, organisations have to develop unique brand building practices to increase brand awareness and differentiate their service brand from competitors. The present study attempts to analyse how the brand building practices of commercial banks in Kerala were perceived by bank customers and their influence on brand equity, customer satisfaction, and behavioural intentions. The scope of the study is confined to selected brand building practices such as advertisement, customer relationship management, corporate social responsibility, social media, internal branding, and promotional offer and discount schemes employed by the commercial banks in Kerala. Further, the study examines the influence of socio-demographic variables and organisational properties on brand building practices, customer-based brand equity, customer satisfaction, and behavioural intentions.

The study also explores the mediating effects of customer satisfaction in relation to customer-based brand equity and behavioural intentions. The study also assesses the mediating role of customer-based brand equity in relation to brand building practices and behavioural intentions. Finally, the study examines the moderating effect of the type of banks in relation to the brand building practices of the commercial banks in Kerala and the behavioural intentions of customers. The population selected for this study is the banking customer base in Kerala. The study included 25% of public and private sector banks operating in Kerala. 3 public sector banks such as Canara Bank, State Bank of India, and Union Bank of India, and 5 private sector banks such as CSB Bank Ltd., Federal Bank Ltd., HDFC Bank Ltd., ICICI Bank Ltd. and South Indian Bank Ltd. was chosen. From the population, the sample was taken from Kannur, Palakkad, and Thrissur districts on behalf of low, moderate, and high numbers of branches, respectively. The focus of the study was limited to the perception of customers towards brand building practices, their brand equity, customer satisfaction, and behavioural intentions.

## 4.8 Research Methodology

### 4.8.1 Research Design

Descriptive and analytical research was carried out to understand how customers perceived the brand building practices employed by commercial banks operating in Kerala and their influence on brand equity and behavioural intentions. This study attempted to offer a thorough knowledge of how brand building practices and customer perceptions interact, as well as how these interactions affect customers' behaviours. The descriptive research provided explanations of behaviours and characteristics by gathering information associated with the customers. By analysing the various brand building practices used by commercial banks, the study attempted to provide insight into the elements that affected customers' decisions regarding a specific bank brand. The study aimed to shed light on the main factors influencing customer preferences and decision-making processes by assessing various brand building practices. Hence, it was essential for banks to comprehend the factors that influence customer decision-making while choosing a bank brand to create strategies that effectively attract their intended customers. The study finally analysed the relationship between brand building practices, customer-based brand equity, and behavioural intentions by applying a appropriate statistical techniques.

### 4.8.2 Source of Data

The present study tried to identify the influence of various brand building practices adopted by different commercial banks operating in Kerala. The study employed both primary and secondary data collection methods to source the information required for the investigation. Customers of commercial banks in various parts of Kerala state were contacted directly to get primary data. The study attempted to learn first-hand perceptions and opinions about the brand building practices employed by commercial banks by collecting responses from the bank's customers. The secondary data enabled a more thorough understanding and provided opportunities for comparison with results from earlier studies. The study would offer meaningful recommendations based on the findings and the existing literature.

### 4.8.2.1 Secondary Data

The study gathered secondary data from appropriate sources, particularly the reports and publications of the World Bank, International Monetary Fund (IMF), Reserve Bank of India(RBI), India Brand Equity Foundations (IBEF), Indian Bankers Association (IBA), Indian Institute of Banking and Finance (IIBF), the State Level Bankers' Committee (SLBC), and selected public and private sector banks, Brand Finance-Global, India, Banking, Economic Review, and Economic Times, that offered relevant information on facts, trends, and practices relating to banks. Further, the study incorporated data on several banking-related topics, including market dynamics, banking laws, customer behaviour, and industry performance, that gave a strong basis for comprehending the circumstances and background of the research topic. The study also used data from national and international scholarly journals, conference proceedings, and articles published in periodicals related to the field of study. These academic sources provided theoretical framework, empirical research, and business knowledge that supported in the analysis and interpretation of the research findings.

### 4.8.2.2 Primary Data

To get a fundamental understanding of brand building practices in banks, the researcher conducted informal, unstructured interviews with marketing managers, branch managers, executives, and other decision-making authorities of various banks. It helped to gather first-hand information about the topic under study. The informal interview helped to get an honest review and opinion about the topic under study and gather the required information about the strategies, procedures, and other aspects related to brand building in the banking industry. The study employed a structured and validated questionnaire to examine customer perceptions of brand building practices and their influence on brand equity and behavioural intentions among the commercial banks in Kerala. The design of the questionnaire was carefully drafted to gather essential aspects of brand building practices, brand equity, customer satisfaction, and behavioural intentions. The questionnaires were prepared after an extensive review of the relevant literature, and they were then improved through a pilot study to assure their clarity and dependability.

### 4.8.3 Sampling Design

Sampling is a part of statistical technique in which the whole study is based on a part of the population to draw conclusion about the characteristics of the entire population. The unit considered for the study based on the research techniques and the analysis. Sampling design ensures that the selection of samples is accurate and represents the characteristics of the wider population. Further, it ensures the suitability of the sample to address the study objectives, minimises sampling bias, and assures a well-designed sampling plan.

#### 4.8.3.1 Population

The state of Kerala chosen as the study's geographic focus as it has a thriving banking industry and multiple commercial banks that serve a wide range of customers. The population of the study included customers of selected public and private commercial banks operating in Kerala. The rationale for the selection of the population was based on the study’s aim and objectives. Therefore, the study was conducted among the population within the context of the banking industry in Kerala to explore customers' perceptions on brand building practices and their influence on brand equity and behavioural intentions. As the population is drawn from both the public and private sectors of commercial banks, the samples provided an exhaustive representation of the banking sector in Kerala. Further, the data collected ensures validity and can be relied upon as generalisations were improved by incorporating samples from both type of banks on customer experiences and their perspectives. Additionally, data were sourced only from customers of the selected commercial banks who had an established relationship with them, as these customers had varied degrees of involvement and knowledge regarding the brand building practices employed by the banks, making their perspectives and insights useful for the study. To conclude, the study gather the experiences and perceptions of customers who interact with banks.

#### 4.8.3.2 Sample Size Determination

The pilot research, which included a sample of 80 respondents, was used to establish the sample size. The sample size was established at a significance level of

5% ensuring that the standard error would remain within allowable bounds. The following formula was applied to calculate the sample size: Israel, (1992)

Sample size (n) = $(ZS/E)^2$

Where, Z= Standard Value for 95% confidence level = 1.96

S= Standard deviation of the pilot study's 80 samples = 0.652

E= Acceptable Error = 5% (i.e., 0.05)

Therefore, the sample size determined (n) = $(ZS/E)^2 = (1.96*0.652/0.05)^2 = 653.23$

Finally, 654 data samples were collected for the purpose of the study.

The researcher considered the sample size in accordance with the covariance-based structural equation modeling (CB-SEM) approach during the data analysis phase of the research. According to Tanaka's (1987) recommendations, a sample size that maintains a 5:1 ratio of cases to free parameters is appropriate for the implementation of structural equation modeling (SEM) analysis through maximum likelihood estimation, assuming the use of multivariate normal data. The study considers that a sample size of 654 to be appropriate for conducting CB-SEM models.

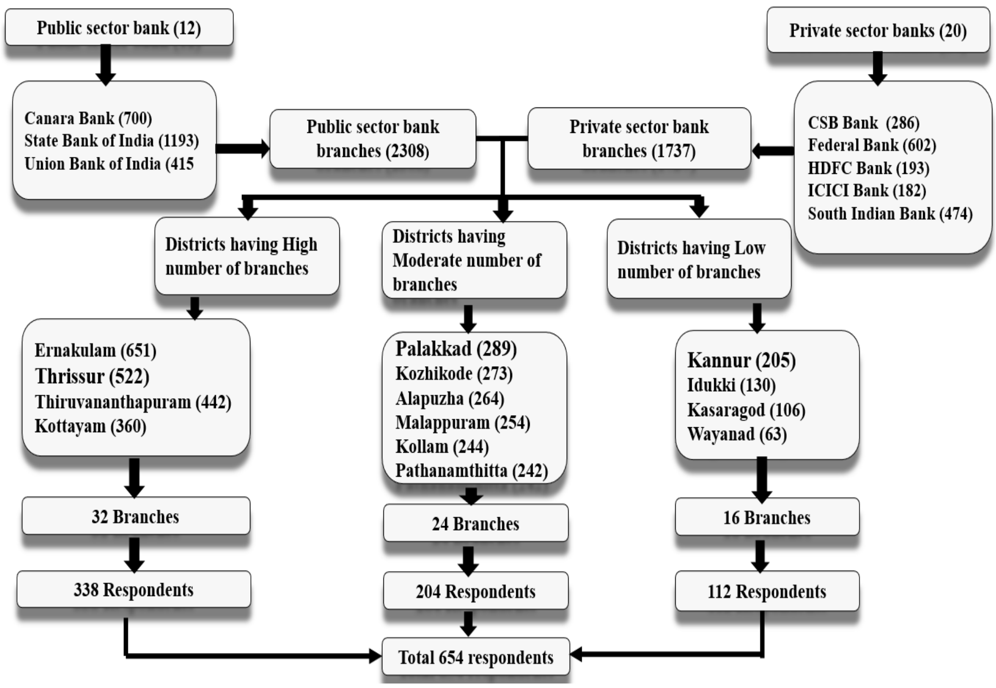
### 4.8.3.3 Sampling Technique

The process for choosing the sample for the study has been meticulously planned to be in line with the objectives of the investigation. The study has been conducted by selecting a representative sample of customers from Kerala from both public and private sector commercial banks. A multi-stage random sampling method was used to choose respondents to assess how customers in Kerala's commercial banks perceived brand building practices and how it affected bank's brand equity and customer behaviour. To ensure a complete representation of samples from the commercial banking sector in Kerala, both public and private sector banks were equally considered while choosing the sample. In total, there are 20 private sector banks and 12 public sector banks operating in the state. From each category, 25% of banks were selected using the lottery method. Five private sector banks, such as CSB Bank Ltd., Federal Bank Ltd., HDFC Bank Ltd., ICICI Bank Ltd., and South Indian Bank Ltd., as well as three public sector banks, such as Canara Bank, State Bank of India, and Union Bank of India, were selected. The foreign banks are not included in the study as these banks are not very active in the retail segment of Kerala state.

In the second stage, the fourteen districts of Kerala state were divided into three categories based on the number of branches, and finally, the number of branches to be included in the study was determined. This categorization was carried out to ensure participation from various geographic areas and to take into consideration any variations in the accessibility and availability of banks within the state. The total number of bank branches in each district was considered while determining the categories. The first group consisted of districts with a high concentration of branches; the second group was composed of districts with a moderate number of branches; and the third group was made up of districts with a comparatively low number of branches. This stratification ensured that the sample consisted of customers from varied geographical areas. The districts with the lowest number of branches included Kannur (205), Idukki (130), Kasaragod (106), and Wayanad (63); districts with a moderate number of branches included Palakkad (289), Kozhikode (273), Alapuzha (264), Malappuram (254), Kollam (244), and Pathanamthitta (242); districts with a high number of branches included Ernakulam (651), Thrissur (522), Thiruvananthapuram (442), and Kottayam (360). Through the lottery method, one district from each category was included to ensure representation from each category. Thrissur (522), with a high number of branches; Palakkad (289), with a moderate number of branches; and Kannur (205), with a low number of branches, were the chosen districts. Four branches of each bank brand were selected from Thrissur, the district with a high number of branches; three branches of each bank brand were selected from Palakkad, the district with a moderate number of branches; and two branches of each bank brand were selected from Kannur, the district with a low number of branches. A total of 48 branches were chosen using the lottery method.

In the third and final stage, respondents were selected from each selected bank branch to participate in the study. To assure a representative sample, the questionnaires were distributed to those customers who visited the bank branch within a specific time frame. The time selected was from 10 a.m. to 1 p.m., as it was considered as the peak time during which the customer visited the branch. A sampling interval was chosen to execute the systematic sampling method. Further, the sampling interval of two had been determined, and every second customer who visited the bank branch within the time frame specified was approached to take part in the study. This methodological approach is considered to provide an equal opportunity for every customer within the specified time frame to be included in the sample and helped in ensuring an unbiased selection of respondents. Thus, the study includes 338 responses from the Thrissur district, 204 from Palakkad, and 112 from Kannur, and the total sample collected from the respondents stood at 654.

**Figure 4.3**
**Sample Frame**




### 4.8.3.4 Designing of Questionnaire

The study used analytical and descriptive methodologies to identify the relationships and their effects among the constructs. This helped to understand the fundamental causes and how they affected the findings of the investigation. On the other hand, the descriptive approach concentrated on characterising and summarising the viewpoints, and behaviours of the respondents. By presenting the data in a coherent and understandable manner, it gave a concise and comprehensive depiction of the study. Since the study was cross-sectional in design, information from various respondents was gathered at a single point. This enabled the study to compile data on the constructs of interest and analyse the relationships between them over a predetermined period.

The questionnaire consisted of three sections, and the respondents were requested to fill out and return the completed questionnaire. The first section included demographic information such as age, gender, level of education, occupational background, duration of banking experience, and organisational properties of the bank such as type of banks and bank brand. This information provided insights on the perceptions and reactions of various customer groups for a more detailed study of the data by assisting in the identification of any potential variances in perceptions depending on sociodemographic parameters towards the brand building practices. Further, banks may better satisfy the requirements and preferences of customer groups by tailoring their brand building practices by analysing the relationship between sociodemographic characteristics and brand perceptions based on the data collected via questionnaire. The second part contains questions related to brand building practices employed by banks, such as advertisement, customer relationship management, corporate social responsibility, internal branding, social media, and sales promotion (offer and discount schemes). This helped the banks to gain knowledge of their brand management and make wise decisions about how to strengthen their brand positioning by evaluating the efficacy of brand building practices.

The third part included of questions related to customer-based brand equity, customer satisfaction, and behavioural intentions. This also offered relevant information about how brand building practices affected customer behaviour, brand equity, and overall bank performance. Based on previous studies, a five-point Likert scale was used to measure responses. The study's questionnaire was meticulously developed to make sure that the right scales and measurements were used to assess the constructs of interest. Based on well-established literature and earlier field research, scales were chosen. Validated measures like the brand equity scale and brand perception scale were used to measure brand equity and brand perception. Multiple questions on these scales were designed to measure various facets of brand equity and perception. Each item was rated by the participants on a Likert scale for agreement or disagreement. A standardised customer satisfaction scale was used to measure customer satisfaction. There were seven items on this measure, based on the seven Ps of the service marketing mix, and each statement was rated on the respondents' level of agreement or disagreement. Additionally, using validated measures created especially for measuring behavioural intention-related categories such as repeat purchases and word-of-mouth intention were assessed. The study assured the validity and reliability of the data gathered by using established scales and measurements. This made it possible to evaluate the investigated structures completely and accurately, and it also made it easier to meaningfully analyse and comprehend the findings.

**Table 4.2**
**Variables Used for the Study**

| Nature of Variables | Variables | Sub Variables |
|---|---|---|
| Independent Variables | Socio-demographic Variables | Gender<br>Age<br>Educational qualification<br>Occupation<br>Duration of banking experience |
| | Organisational properties of the banks | Type of banks<br>Bank brands |
| | Brand Building Practices | Advertisement<br>Customer relationship management<br>Corporate social responsibility<br>Internal branding<br>Social media<br>Promotional Offer and Discount Schemes |
| Mediating Variables and Dependent Variable | Brand Equity | Brand awareness<br>Brand loyalty<br>Brand association<br>Perceived quality |
| | Customer satisfaction | |
| Moderating Variable | Organizational property of the bank | Type of banks |
| Dependent Variable | Customer Behavioural Intentions | |

The variables for the study were chosen after carefully examining the existing literature and the intended research objectives. The relationship between brand building practices and their effects on brand equity, customer satisfaction, and behavioural intentions could only be better understood if all the variables and sub-variables were considered. Each variable and sub-variable reflects a particular component of the study. To examine relationships and effects within the study, these variables were found to be appropriate. The objective of the study was to provide a thorough knowledge of the components affecting brand equity, customer satisfaction, and behavioural intention in the context of brand building practices.

#### 4.8.3.4.1 Pilot Study

To evaluate the questionnaire's reliability and validity, a pilot study was done in Thrissur district among the potential respondents before the final data collection. The objective of the pilot study was to evaluate the significance of the questionnaire, determine any potential shortcomings or ambiguities, and make the required changes before the collection of the final data. Before filling out the questionnaire, each question was explained to the respondents, who requested to fill it out on their own. The researcher himself assisted the respondents who were unable to fill out the questionnaire on their own and helped those who required further explanation.

**Table 4.3**
**Pre-testing of Questionnaire**

| Variables | Cronbach's Alpha Value | No. of Items | Deleted Items |
|---|---|---|---|
| Advertisement | 0.906 | 5 | Nil |
| Customer Relationship Management | 0.888 | 5 | Nil |
| Social Media | 0.935 | 4 | Nil |
| Corporate Social Responsibility | 0.933 | 5 | Nil |
| Internal Branding | 0.918 | 6 | Nil |
| Promotional Offer and Discount Schemes | 0.932 | 5 | Nil |
| Brand Awareness | 0.862 | 5 | Nil |
| Brand Loyalty | 0.901 | 5 | Nil |
| Brand Association | 0.911 | 5 | Nil |
| Perceived Quality | 0.925 | 5 | Nil |
| Customer Satisfaction | 0.911 | 7 | Nil |
| Behavioural Intentions | 0.835 | 4 | Nil |

*Source: Primary survey*

Since all the values of Cronbach's alpha are above 0.7, it can be inferred that the scale was reliable in terms of internal consistency (Nunnally, 1967). This confirmed that the data collected using the above construct was reliable, accurate, and free from structural inconsistencies. This further indicated that the data collected for the present study was reliable and gave consistent results when repeated, which fostered the idea that the data accurately reflected the phenomenon being investigated. Therefore, it can be relied upon for further examination and interpretation to derive valid conclusion for making decisions.

### 4.8.4 Final Reliability and Validity of the Co-variance Based Confirmatory Factor Analysis Models.

A statistical method called confirmatory factor analysis (CFA) is used to verify the factor structure of a set of observed variables. The researcher uses CFA to investigate the hypothesis that reveals the relationship between the variables that are observed and their latent constructs (Suhr, 2009). Reliability and validity are shown by the factors. The following tools were employed to assess the measurement model:

#### 4.8.4.1 Composite Reliability (CR)

In structural equation modelling, composite reliability measures a construct's total reliability. It measures the degree to which the observed construct reflects the underlying latent variable. Reliability is measured on the basis of factor loading and the residual value. A construct is said to be reliable if the factor loading is high (indicating that there exists a high correlation between the observed constructs and the latent variable) and the residual value is low (indicating a low discrepancy between the observed constructs and the latent variable). The value ranges from zero to one. Good composite reliability values are greater than or equal to 0.70 (Hair et al., 2010). Internal consistency is lacking if the value is less than 0.6.

#### 4.8.4.2 Construct Validity

Convergent and discriminant validity can be employed to measure construct validity.

**(a) Convergent Validity**: The level of correlation or agreement between various measurements of the same construct is referred to as convergent validity. It explains the extent to which an indicator accurately represents the underlying concept that it is meant to evaluate. The indicators or the observed variables in a particular construct have to converge or share a significant proportion of variance. According to Hair et al. (2010), the fundamental problem with convergent validity is that if the observable variables are present throughout the validity assessment, they do not properly explain the latent component. Malhotra et al. (2001) opined that Average Variance Extracted (AVE) is a more stringent convergent validity measure than CR. For quantifying convergent validity in this study, the researchers employed the AVE and used conventional factor loadings to determine the AVE value. The AVE's threshold value >0.5, the indicator of convergent validity, reflects the strength of item factor loadings (Hair et. al., 2010). In this investigation, the criterion value for establishing item validity based on factor loading standardisation is >0.5 (Hair et. al., 2010). The degree of correlation between an observed item and its related latent construct in the measurement model is indicated by factor loading. It verifies that the observed items have a significant and meaningful correlation with the corresponding underlying constructs by putting the criteria at 0.5, demonstrating a strong measurement relationship between the indicators and the latent variables. Therefore, convergence is considered to exist if both the AVE value and the standardised factor loadings are larger than 0.5.

**b) Discriminant validity**

Discriminant validity describes how much a construct genuinely differs from other constructs. High discriminant validity exhibits that the constructs are distinct and capture things that other constructs do not. The latent variable is better described by other variables than by its own observable variables if the discriminant validity test fails to reveal the expected findings, which suggests that the variables significantly correlate with variables of other constructs. The Fornell and Larcker (1981) standards, a conservative approach to evaluating discriminant validity, were used by the researcher. Assess the square root of the average variance extracted for each construct in relation to the correlation coefficients between that construct and the other constructs in the model. The AVE's square root represents the latent construct and its indicators' shared variance. The discriminant validity of the concept is supported when this value is higher than the correlation with other constructs, indicating that the construct shares more variance with its own indicators than with other constructs. In other words, it compares the square root of the AVE to the latent variable correlations. Each construct's AVE should have a square root that is greater than the correlation of its latent variable with other constructs. This allows for establishing discriminant validity.

**Table 4.4**
**Final Reliability and Validity of CFA Model**

| Factors of Brand Building Practices | Cronbach's Alpha Value Final | AVE | Composite Reliability |
|---|---|---|---|
| Advertisement (ADVT) | 0.89 | 0.65 | 0.90 |
| Social Media (SOM) | 0.92 | 0.76 | 0.93 |
| Corporate Social Responsibility (CSR) | 0.92 | 0.71 | 0.93 |
| Promotional Offer and Discount Schemes (POS) | 0.91 | 0.72 | 0.93 |
| Internal Branding (INB) | 0.92 | 0.71 | 0.94 |
| Customer Relationship Management (CRM) | 0.87 | 0.59 | 0.88 |
| Brand Loyalty (BRL) | 0.92 | 0.69 | 0.92 |
| Brand Association (BRA) | 0.91 | 0.70 | 0.92 |
| Perceived Quality (PRQ) | 0.91 | 0.74 | 0.93 |
| Brand Equity Awareness (BEA) | 0.87 | 0.59 | 0.88 |
| Behavioural Intentions (BHI) | 0.84 | 0.60 | 0.85 |
| Customer Satisfaction (CUS) | 0.91 | 0.63 | 0.92 |

*Source: Primary survey*

Cronbach's Alpha is greater than 0.80, indicating that the items used to measure the construct are reliable. All constructs are internally consistent if the Composite Reliability value is > 0.80. Additionally, AVE value > 0.5, shows significant convergent validity, demonstrating that the components of measurement within each construct are closely associated with and assess the same underlying concept. It also indicates that the constructs are consistent and reliable in their ability to capture the desired constructs.

### 4.8.4.3 Normality Analysis of Data

The normality test determines whether data is normally distributed or not. If the data is normally distributed, the values usually concentrate around the mean, and there would be an equal number of observations on either side of the mean (Sarstedt & Mooi, 2014)

**Table 4.5**
**Kolmogorov-Smirnov test for Measuring Data Normality**

| SI No. | Constructs | Kolmogorov-Smirnov test | |
|---|---|---|---|
| | | Statistic | Sig. |
| 1 | Advertisement | 0.016 | 0.200* |
| 2 | Customer Relationship Management | 0.019 | 0.200* |
| 3 | Social Media | 0.021 | 0.200* |
| 4 | Corporate Social Responsibility | 0.024 | 0.200* |
| 5 | Internal Branding | 0.017 | 0.200* |
| 6 | Promotional Offer and Discount Schemes | 0.016 | 0.200* |
| 7 | Brand Awareness | 0.019 | 0.200* |
| 8 | Brand Loyalty | 0.017 | 0.200* |
| 9 | Brand Association | 0.015 | 0.200* |
| 10 | Perceived Quality | 0.022 | 0.200* |
| 11 | Customer Satisfaction | 0.020 | 0.200* |
| 12 | Behavioural Intentions | 0.025 | 0.200* |

*Source: Primary survey*
** This is a lower bound of the true significance*

To ensure the reliability of statistical research and to choose the best statistical methods for data analysis, it is crucial to evaluate normality. The above table indicates that the P values resulting from the Kolmogorov-Smirnov test surpass the established significance level of 0.05. This suggests that the data related to every construct demonstrates features of a normal distribution. Therefore, it can be confirmed that data is normally distributed.

### 4.8.5. Data Analysis Tools

- To investigate the customer perception of brand building practices adopted by commercial banks in Kerala: mean, standard deviation, quartile settings, percentage analysis, one sample t-test to measure the difference between the sample mean and population mean, the independent t-test is used to compare the mean values of two independent groups, Chi-Square test for goodness of fit, ANOVA with Tukey HSD's post hoc analysis, were employed using the IBM SPSS 21 software.
- To assess the level of customer-based brand equity, customer satisfaction, and behavioural intentions of the customers of commercial banks in Kerala, Quartile settings, Percentage Analysis, the Chi-Square test for goodness of fit, and the Chi-square test for association were employed with the help of the IBM SPSS 21 software package.
- To explore the interrelationship among brand building practices, customer-based brand equity, customer satisfaction, and behavioural intentions of the commercial banks in Kerala, the IBM SPSS AMOS graphics 21 programme was used to implement the (CB-CFA) and (SEM) procedures.
- To evaluate the mediating role of customer satisfaction in relation to customer-based brand equity and the behavioural intentions of the customers, the IBM SPSS AMOS Graphics 21 programme was used to collaborate with (SEM) and bootstrapping processes.
- To examine the mediating role of customer-based brand equity factors and the moderating effect of the type of banks in relation to the brand building practices of the commercial banks in Kerala and the behavioural intentions of customers, moderated mediation analysis, Structural Equation Modelling (SEM) technique, bootstrapping procedures, Chi-square difference test, and Heterogeneity test for testing moderated mediation analysis were used with the help of IBM SPSS AMOS Graphics 21 and MS Excel software packages.

### a) Mean

The mean is a measure of central tendency is used in the study to measure the extent of brand building practices by commercial banks in Kerala based on customer perception. The mean is used to compare and draw inferences regarding branding practices by contrasting the mean scores across different banks or customer demographics. Means is also used as the basis for statistical tests like t-tests and ANOVA that evaluate the significance of variations among brand building practices.

### b) Standard Deviation

The standard deviation plays a crucial role in assessing the effectiveness of brand building practices among the commercial banks in Kerala. The standard deviation offers a measure of dispersion of how customers' perceptions of brand building practices vary. It reveals the degree to which customer perception deviates from the mean. The standard deviation complements the mean by giving significant insight into the distribution of data points to better understand how customers usually feel about brand building practices used in Kerala's banking sector.

### c) One Sample t-test

One-sample t-test is used to assess whether the observed mean score for brand building practices and customer-based brand equity substantially varies from the population mean that is hypothesised. Based on the hypothesis, it helps to determine whether the actual sample mean of brand building practices and customer-based brand equity is significantly differ from the expected population mean. It also helps in making inferences about the effectiveness of the brand building practices of commercial banks in Kerala.

### d) Independent t-test

Independent t-test is employed to compare the mean values of customer perception of brand building practices among various socio-demographic variables and organisational properties. It also explores whether customers of public sector banks and those of private sector banks have different levels of brand building practices.

**e) ANOVA with Tukey's HSD (Honestly Significant Difference) post hoc analysis.**

ANOVA is employed to investigate whether there exist significant differences in customer perception towards brand building practices based on age, educational qualification, occupation, duration of banking experience, and bank brand. When the ANOVA test reveals a significant p-value (usually below a predefined alpha threshold, such as 0.05), it suggests that at least some of the group means among the above factors differ significantly from one another. Thus, a post hoc analysis is performed to determine whether individual group means are statistically distinct from one another and allow for pairwise comparisons across groups. One popular post hoc analysis is Tukey's HSD test, which evaluates all feasible pairwise comparisons to ascertain if there are statistically significant variations between the group means.

**f) Quartile Settings**

Quartile setting is used to assess customer perception levels of customer-based brand equity factors across the socio-demographic profile of the customers and the organisational properties of the banks. The quartile deviation data set is divided into four equal sections using quartiles and subdivided into three levels, such as high level, moderate level and low level. The data distribution is described by the quartiles, which also help in the analysis of the variance and central tendency.

**g) Percentage Analysis**

Percentage analysis is employed to investigate the customer perception of brand building practices adopted by commercial banks in Kerala by estimating the proportion or percentage of respondents who have particular perceptions or attitudes towards these practices. This investigation offers an in-depth comprehension of how customers interpret every aspect of brand-building practices.

**h) Chi-Square Test for Goodness of Fit**

The chi-square test for goodness of fit is used to examine customer perception levels of brand building practices. This test is used to identify whether the observed perceptions significantly depart from the predicted distribution or customer expectations by assessing customer perception levels of brand building practices.

**i) Chi-square Test for Association**

The Chi-Square Test is used to determine whether there is a significant correlation between customer perception levels of customer-based brand equity variables and customer sociodemographic profiles as well as organisational characteristics of banks. To compare the observed and predicted responses for each category under the assumption of no relationship. The test contributes to identify whether levels of brand equity factors are perceived by customers to vary significantly based on various socio-demographic characteristics of customers such as age, gender, education, and occupation, as well as organisational characteristics of banks such as bank type, duration of banking experience, and bank brands.

**j) Structural Equation Modeling**

This study employs structural equation modeling (SEM) to investigate the intricate relationship between brand building practices, customer-based brand equity, customer satisfaction, and consumer behavioural intentions in commercial banks in Kerala. A theoretical model reflecting the assumed relationships between these variables is being developed as part of the study. The model's parameters are then estimated using SEM, thereby offering insights into the strength and direction of the relationships between the variables and helps in understanding of how brand building practices affects customer-based brand equity, satisfaction, and behavioural intentions among the commercial banks in Kerala.

**k) Bootstrapping Procedures**

The current investigation uses bootstrapping technique to analyse the mediating effects of the pathways. The analysis employs a total of 5000 bootstrap samples and utilises the IBM-SPSS-AMOS Graphics 21 software package to facilitate the process. Bootstrapping is used to estimate the mediating effect of customer-based brand equity and customer satisfaction and to evaluate the variability and unpredictability of parameter estimations. Bootstrapping builds a simulated population that entails creating several replicates from the original data with replacement.

**i) Chi-square Difference test**

As a statistical method, the chi-square difference test was used to examine the significance of moderating effects associated with the type of banks (public sector bank and private sector bank). The test's objective was to determine whether these two type of banks' brand-building practices, customer-based brand equity, customer satisfaction, and behavioural intentions differed significantly at the model level. The difference test facilitates to determine whether adding or removing specific model constraints significantly enhances the model's ability to match the data. The test aids in assessing the effects of particular alterations on the overall model fit and offers useful insights into model selection.

**m) Heterogeneity test**

Heterogeneity tests are performed on the model to assess the significant differences among the path values (indirect effect paths) of the moderated mediation model for commercial banks in Kerala for the two type of banks, namely, the private and public sector banks. This statistical evaluation is considered necessary to assess the significance of moderated mediating effects. The results indicate whether there exist significant differences in the indirect influence of path values between the two distinct bank groups.

## 4.9 Operational definitions

**a) Brand Building Practices**

Practices undertaken by the banks to build, nurture, and promote a brand by creating awareness and value for the customers. Effective brand building practices help banks to increase customer confidence, loyalty, and preference, which ultimately encourages bank brand growth and success in the highly competitive banking sector.

**b) Advertisement**

The use of mass media to inform the public about the bank's services and persuade them to use them enhance the bank's image. Banks use advertisements to create awareness among their customers, emphasise the unique qualities and features of their services, and eventually improve the bank's reputation and image.

**c) Customer Relationship Management**

The strategies employed by the bank to maintain long-lasting relationships with customers entail establishing frameworks, technologies, and tactics in operation to effectively comprehend, anticipate, and satisfy customer requirements and preferences. Strong relationships with customers help banks to retain existing customers and attract new ones.

**d) Corporate Social Responsibility**

The socially responsible activities are undertaken by the banks to improve their reputation and brand value by adhering to moral principles, discharging environmental responsibilities, and having a positive community impact help them to differentiate from competitors and improve their reputation.

**e) Internal Branding**

Initiatives adopted by the bank to enable the bank’s staff to serve their customers better and equip them to act as brand ambassadors of the bank are referred to as internal branding. Employing effective internal branding experiences nurtures motivated and committed employees who provide great customer service, strengthens the bank's brand identity, and creates a dependable and unique customer experience.

**f) Social Media**

Interactions are done by the banks on social media platforms to facilitate customer brand engagement. Banks improve their brand recognition through social media, establish meaningful relationships with customers, and gather valuable information regarding their preferences and behaviours.

**g) Sales Promotion**

Promotional offer and discount schemes are provided by banks in order to increase the usage of banking services. Banks provide exclusive offers, exceptional interest rates, cashback rewards, fee waivers, or other benefits as strategies for sales promotions to improve brand awareness, encourage interaction with customers, and eventually help the bank expand and become more profitable.

**h) Customer-based Brand Equity**

The value that derives from customer perception of the bank brand is customer-based brand equity. It is an indicator of how strongly people have positive connections with a certain bank brand. A strong customer-based brand equity indicates that customers have a favourable opinion of the bank brand, which enhances customer loyalty, advocacy, and overall bank performance.

**i)Brand Awareness**

The ability of the customer to recognise the bank brand is known as brand awareness. It evaluates the ability of a customer to recognise and recall a certain bank brand when exposed to messages or stimuli like logos, slogans, or advertisements. A high degree of brand awareness indicates that customers are familiar with and understand the bank's brand.

**j) Brand Association**

The information nodes linked to the bank brand are coined in brand association. The thoughts, emotions, perceptions, and experiences that customers have when they associate with their bank's brand are based on a number of characteristics, including brand personality, reputation, and customer service. Positive brand associations improve how customers feel about the bank.

**k) Brand Loyalty**

The favourable attitude of customers towards a particular brand is termed as brand loyalty. It indicates the customer's overall affinity for the brand over its competitors. Customers who are brand loyal show higher levels of brand satisfaction and trust and are less likely to switch to competing brands.

**l) Perceived Quality**

Customers' expectations of the quality of service are known as perceived quality. It is based on their perceptions, experiences, and convictions about the services offered by the bank. Based on a number of variables, including dependability, responsiveness, expertise, and tangibles, customers assess the quality of the services they get.

**m) Customer Satisfaction**

State of pleasurable fulfilment resulting from availing of a service. It indicates the overall assessment or perception made by the customer regarding their interaction with a bank's service or product. As a result of using the bank's services, it symbolises the feeling of being satisfied, happy, or fulfilled.

**n) Customer Behavioural Intentions**

Customers' propensity or inclination to behave in a particular way towards their bank is referred to as customer behavioural intentions. Conscious plans are made by customers to engage in specific behaviours, such as the desire to recommend or repurchase, the decision not to switch service providers, and being ready to pay a premium price.

## 4.10 Limitations of the study

The present study aimed to understand the brand building practices adopted by commercial banks in Kerala. It also attempted to identify the influence of brand building practices on brand equity and behavioural intentions among customers. Therefore, the study would be quite unique in its nature and had its own inherent limitations. One of the shortcomings of the study was that it did not include all the brand building practices employed by commercial banks operating in Kerala. Therefore, the study’s framework may not be able to exhaustively cover certain practices, even though attempts were made to identify and include pertinent practices based on the available literature and expert opinions. Though the present study acknowledges that there were several brand building practices employed by the commercial banks and is important to understand these practices. However, this study includes only six brand building practices employed by the commercial banks in Kerala. These practices have been identified and selected based on literature and feedback from bank executives. Further, it was challenging to find comprehensive information on brand building practices adopted by the banks as certain information was considered sensitive and confidential by the banks. Therefore, commercial banks would have concealed sensitive information about their brand building practices and the expenditures involved. This restriction limited the scope of the analysis and the ability to present an exhaustive knowledge of the various brand building practices used by commercial banks. Moreover, the present study includes data only from within a limited geographical scope, as a representative sample was drawn only from three districts in Kerala state. This was due to restrictions with respect to time and resource constraints associated with data collection and processing. Further, the study was limited to eight banks, three from the public sector and five from the private sector, as the inclusion of additional banks would make it challenging to carry out the data collection, which may not be an exact representation of the banking sector in Kerala. Further, the study was restricted to the influence of brand building practices on brand equity and customer behavioural intentions among commercial banks. Furthermore, the study relied on the information given by the customers of commercial banks in Kerala. Hence, the chances of respondent bias or distortion were very high, although attempts were made to assure the accuracy and authenticity of the information provided by the customers. Customers may respond in a way that is socially acceptable, or their opinions may be skewed by several variables, such as memory bias or personal prejudices.

An extensive overview of the procedures and methods used in this investigation is highlighted in this chapter. The chapter outlined the research problem, research objectives, and research questions, which assisted in guiding the choice of the most suitable research methodologies. The robustness and validity of the study were ensured by carefully discussing a variety of research approaches, which include data collection, data analysis, and sample techniques. To assure the validity and dependability of the study findings, limitations were also acknowledged and addressed. Overall, the chapter depicts the investigation's overall quality and robustness by providing an appropriate framework for the empirical analysis.