CHAPTER 3

THEORETICAL FRAMEWORK

3.1 INTRODUCTION

The theoretical framework of the study forms the structure that can hold or support a theory of a research work. A theoretical framework provides guidance in determining what things to measure, and what statistical relationships should be analyzed in a research. Theories are constructed in order to explain, predict and analyze relationships between variables of interest in the study. The theoretical framework provides a general representation of relationships between variables under study. The conceptual framework, on the other hand, embodies the specific direction by which the research will have to be undertaken. Statistically speaking, the conceptual framework describes the relationship between specific variables identified in the study. While the theoretical framework is the theory on which the study is based, the conceptual framework is the operationalization of the theory. As with any relational analysis, development of a conceptual framework assist the researcher to complete two processes as suggested by Bliss et al (1983):

- Gives a broad scope to thinking about the research and conceptualizing the problem.
- Provides a means to link ideas and data so that deeper connections can be revealed.
This chapter also elaborates the procedure by which various hypotheses are developed based on the model developed for study.

3.2 PRELIMINARY THEORY DEVELOPMENT

The major constituents which are significant in service quality studies includes

- Customer Expectations
- Perceived Service quality
- Customer satisfaction
- Customer Behavioral intentions

The key objective of service quality research lies in regular evaluation of critical variables which affects customer satisfaction for designing strategies to meet and exceed customer expectations by service providers. Continuous efforts in improving service quality perceived by the customer tend to develop favorable behavioral intentions among customers (Zeithaml et al 1996; Bitner 1990; Lee and Hwan 2005, Gour and Theingi 2009). The important step in a typical Quality improvement program consists of four essential steps as mentioned in Figure 3.1. The four steps mentioned are adopted from DMAIC acronym that stands for define, measure, analyze, improve, and control promoted in Six Sigma terminology. Even though Six Sigma was developed in the 1980's to reduce defects in a manufacturing industry, concepts and methodologies widely used in the service sector and found to have potential to produce better results in financial sector (Kumar et al 2008). The concept has been introduced in the context of this study to highlight the importance of defining the parameters in accordance
with customer expectations and measuring the parameters for proper evaluation are improvement of quality initiatives.

**Figure 3.1 Steps in Quality Improvement program**

There exists considerable debate concerning the ordering of Perceived service quality (PSQ) and Customer Satisfaction (CS). Some researchers argued that CS → PSQ based on the assumption that CS is a result of disconfirmation for a single transaction and PSQ is a result of multiple service transactions (Bitner, 1990). Others contend that PSQ → CS. Oliver (1993) suggests that CS is a function of the disconfirmation of expectations, and therefore specifies PSQ as an antecedent of CS. Several studies proposed reciprocal relationships between CS and PSQ, but found only the PSQ → CS ordering to be significant (e.g. Cronin and Taylor 1992). Hence for this study, it was considered that PSQ is an antecedent of CS.

In conceptualization of perceived service quality construct, the role of customer expectations was considered significantly (Parasuraman et al 1984; Peterson and Cai 2003, Al-Hawari et al 2005) and insignificantly (Lee et al 2000; Page and Spreng 2002; Cronin and Taylor 1992; Roszkowskit et al 2005; Caro and Gracia, 2007; Wilkins et al, 2007) by various scholars. However, considering observations made by pioneers (Gronroos 1982; Lewis and Booms 1983; Parasuraman et al 1984) in the service quality theory that Perceived Service quality involves a comparison of expectations with performance by the customer, this study considered
Customer expectations as the major antecedent to perceived service quality. However for evaluating service quality only perceptions were considered. Various studies have identified that the perceived service quality and Customer satisfaction are antecedents of behavioral intentions of the customer (Bitner et al 1990; Jones and Suh 2000; Cronin and Taylor 1992). Also causal models proposed by Dabholkar et al 2000; Festus Olorunniwo et al 2006; Birgit Leisen Pollack 2009 and Riadh Ladhari 2009 narrated in sec2.7 provided theoretical justification for assuming causal relationship as shown in Figure 3.2 was considered for this study.

![Figure 3.2 Sequence of causal relationship used in the study](image)

The focus of every research lies typically on identifying the relationships between constructs proposed in the study and how these constructs are measured. A construct is a conceptual term used to describe a phenomenon of theoretical interest to the researcher and which is not directly measurable (e.g. Customer satisfaction, trust etc). A measure is a quantifiable assessment to the degree where the respondent believes in the existence of the construct. The data for the respondent’s agreement or disagreement is collected by means of questionnaire surveys in most of the studies.

The criteria proposed for assessing the soundness of measures were based on key concepts in classical test theory namely reliability and validity (Nunnally and Bernstein 1994). A reliable measure is one that measures a construct consistently across time, individuals, and situations; whereas a valid measure is one that measures what it is intended to measure (Joppe 2000).
The above model involving four constructs was further extended to develop the research model for this study.

3.3 EXPLANATION OF CONSTRUCTS

3.3.1 Expectation

The rationale behind considering expectation in the theoretical framework was well documented in the sec2.1 and in sec3.2. However the approach adopted to explore the expectation components requires further elaboration. In this study the antecedent role of expectation was considered rather than using the component for measuring perceived service quality as conceptualized by Parasuraman et al 1984. To understand the expectations of the customer the following two aspects were analyzed.

- The factors which developed expectations in customer about the service encounter

- What are the desired expectations of the customer about the service provider in the retail banking context.

Parasuraman et al (1996), identified the following factors to have influence on desired expectation level of the customer

- Various service promises both explicit and implicit which includes Personal and non-personal statements about the service made by the organization

- Word-of-mouth communication which Carries particular weight as an information source because it is perceived as unbiased—Including Consumer Reports, friends, and family
Past experience which means customer’s previous exposure to service that is relevant to the focal service

personal needs of customers

Therefore a construct by name “Expectation developers” was considered in this study with indicators as agreement of respondents to the influence of above mentioned factors.

The desired level of expectation being the critical level that influences the zone of tolerance (ZOT) of the individual customer, it was felt that a construct capable of capturing desired expectation are essential. Also the antecedent role of desired expectations worth exploring for the simple reason that indicators used to measure desired expectations turn to be the moments of truth (Jan Carlzon 1981) for the customer. Every customer approaches a service encounter with enthusiasm and anticipation about the outcome. Understanding of the customer expectations plays a vital role in delivering superior service. According to Parasuraman et al (1996), customers hold two types of expectation namely desired and adequate. Desired expectations are “should be” expectation and are considered as an ideal level of service and deviating from this level can produce dissatisfaction. Adequate level of expectations is minimum level expectation and in present day banking under stiff competition trends, these cannot be considered as a yardstick for achieving superior service quality. Hence in this study analyzed desired expectations of the customers and assumed the same as antecedent to perceived service quality. Thus the following two constructs were proposed to analyze the expectation component of the customers

- Expectation developers
- Desired expectation
3.3.2 Perceived Service Quality

Even though various researchers agreed that perceived service quality is a multidimensional construct, confusion remained about dimensions it comprised off (Dabholkar et al 2000; Wilkins et al 2007, Ladhari 2009, Saurina Canals 1997, Buttle 1996 and Robbinson 1999). As researchers continue to debate the determinants of service quality, the following important issues remain unanswered:

- the universality of service quality determinants across various types of services
- the importance and nature of operating characteristics of determinants as they together constitute the service quality
- Whether the service characteristic gets reflected when customers generates expectations from a particular service delivery (Chowdhary and Prakash 2007; Pal and Choudhury 2009).

Most measures of perceived retail banking service quality have assumed a first order reflective model and there has been little effort to develop and test a hierarchical second order model in Indian context. This study aims to develop and validate a hierarchical model of retail-banking specific service quality measure, by examining its factorial structure and assessing its reliability and validity, so that there’s better understanding of its determinants. There is theoretical support in literature for a multi dimensional, multi level model of service quality (Carman 1990; McDougall and Levesque 1994; Dabholkar et al 1996; Brady and Cronin 2001) though there has been little effort to empirically test such a structure. This study therefore attempt to develop and test a multi level model or hierarchical model of retail banking service quality using multiple and multi level
dimensions in retail banking. The various dimensions by which the construct was formed are developed on theoretical considerations and are explained in section 3.5.

### 3.3.3 Customer Satisfaction

The next important construct developed in the study was “Customer satisfaction”. Satisfaction with regard to service context is a person’s feelings of pleasure or disappointment resulting from comparing a Service encounter (or outcome) in relation to his or her expectation (Kotler 2001). Satisfaction can be resulted from variety of factors including perceived service quality. Consumer satisfaction has been typically conceptualized as either an emotional (Cadotte et al 1987; Westbrook and Reilly 1983) or cognitive response (Bolton and Drew 1991; Howard and Sheth 1969; Tse and Wilton 1988). Though there are various approaches available in the literature to measure customer satisfaction, researcher prefers to introduce a different approach to handle this latent variable in this study.

Customer satisfaction is the end product to an evaluation process pertaining to the service encounter. The customer experiences the influence of various factors before making the final evaluation (Oliver 1997). The cumulative impact of these factors was evaluated as detrimental in generation satisfaction/dissatisfaction among customer. In every service context the dimensions which forms perceived service quality, if provided to the satisfaction of customers will certainly helps in developing customer satisfaction. For lasting impact of so developed satisfaction, factors such as development of trust, value perception, consistent service delivery etc are essential (Anderson and Mittal 2000). Hence these factors play a critical role in retaining the satisfaction once developed. However in every service context there exist certain factors beyond the control of the service providers like
dissatisfiers (term adopted from Herzberg’s two-factor theory) which adversely affect or reduce satisfaction developed. These satisfaction reducing factors can be economic meltdowns, technology changes, and profitability concerns of the service provider so on.

Customer Satisfaction can be resulted from variety of factors including perceived service quality, value perception, image perception, etc in the context of a service encounter. Consumer satisfaction has been typically conceptualized as an emotional (Cadotte et al 1987; Westbrook and Reilly 1983) or cognitive response (Bolton and Drew 1991; Howard and Sheth 1969; Tse and Wilton 1988). In every service context, certain expectations, if fulfilled, will certainly develop customer satisfaction. For lasting impact of so developed satisfaction, factors such as trust, value perception, consistent service delivery etc are essential (Anderson and Mittal 2000). Hence these factors play a critical role in retaining the satisfaction once developed. The present day customer engages in active involvement with various developments in the environment relevant to the service context in general. Also exposure to complex information of various statures tempts customers to adopt critical subjective evaluations increasingly. Some of these developments encourage the customer to remain satisfied with the service provider whereas certain factors beyond the control of the service providers act like dis-satisfiers (term adopted from Herzberg’s two-factor theory) and will adversely affect or reduce satisfaction once developed. These satisfaction reducing factors can be economic meltdowns, technology changes, and profitability concerns of the service provider so on. Also absence certain features may act as dis-satisfiers in every service context even though their presence may not increase satisfaction (Cadotte and Turgeon 1988).
Johnston (1995) opined that attentiveness, responsiveness, care, and friendliness are the main source of satisfaction in banking services, and integrity, reliability, responsiveness, availability, and functionality are the main source of dissatisfaction. Yang and Fang (2004) identified that dimensions of responsiveness, competence, service reliability, and ease of use as key determinants of both satisfaction and dissatisfaction in online banking context. A satisfaction developer was defined in the context of study as various attributes related to the service context capable of developing satisfaction among banking customers. Similarly satisfaction retainers were attributes that form reason for retaining satisfaction among retail banking customers and satisfaction reducers are environmental factors that tend to reduce satisfaction developed. In this study customer satisfaction conceptualised as multilevel, multi-dimensional construct formed from following dimensions (Figure 3.3).

- Satisfaction developers
- Satisfaction retainers
- Satisfaction reducers

![Figure 3.3 Model of Customer Satisfaction](image)
3.3.4 Behavioral Intentions

The importance of customers’ behavioural intentions to predict customer retention has been recognised by many researchers (Godin et al 2004; Luarn and Lin 2005; Norman and Smith 1995; Patterson 2004). Of all the behavioural intentions, Reichheld (2003) suggested that willingness to recommend was the most important, since it was associated more strongly than any other with a company’s growth. Behavioral intentions were analyzed in this study using two distinct constructs such as positive behavioral intentions and negative behavioral intentions. Behavioral intentions pertaining to positive word of mouth and loyalty were used as positive behavioral intentions whereas intentions related to switch over and complaints were considered as negative behavioral intentions in this study.

3.4 SCALE DEVELOPMENT PROCESS

The term “scale” is commonly used to refer to a measurement instrument developed for the purpose of measuring a theoretical phenomenon that cannot be readily observed or assessed directly (DeVellis 2003). The scale development process is of critical importance in a study and hence specific steps were carried out in order to construct a reliable and valid measure capable of drawing conclusions about the construct(s) measured. Developing a universal scale to measure the perceived quality of banking services was difficult because every case is unique due to specific groups of individual, organization or branch, culture, country and consumer characteristics as revealed from the literature review. Hence, an attempt was made to develop a scale for perceived service quality as well as other constructs, Specifically to suite the requirements of the setting under which study was conducted.
The main traditional procedure for scale development developed was based on Churchill’s (1979) guidelines which involved six key steps viz:

- specification of the domain of the constructs,
- generation of sample items
- purification of measures
- assessment of data,
- assessment of construct validity
- development of norms

The procedure has been criticised for being over dependent on psychometric aspects like the classical reliability theory where reliability was assessed as the ‘the degree to which a multi-item measurement instrument consistently measures a sample of people’ (Finn and Kayande 1997). This approach was largely drawn from psychology studies where the object or unit of study was the person, unlike in marketing where the object can be a firm or a brand which might require generalization. However, Churchill’s (1979) guidelines still remains the main scale development procedure that marketing researchers apply.

A scale is considered uni-dimensional, if all the items of the scale measure one common variable. Gerbing and Anderson (1988), advocated the use Confirmatory factor analysis as a more accurate measure of uni-dimensionality rather than coefficient alpha, item-to-total correlations and suggested that exploratory factor analysis which may be adopted in the preliminary analysis as an item reduction technique. DeVellis (1991) recommends that experts should review the initial pool of items for relevance, clarity, and conciseness and based on comments from expert reviewer’s items may be removed or new items may be considered. Spector (1992), suggested an initial pilot test to be administered with the pool of items to a small
number of respondents, obtain feedback, and make revisions before administering to a larger sample. Most of the scale development literature in marketing was focused on improvements on the Churchill theory by adding procedures or modifying the sequence of procedures to increase psychometric properties of the measure. The content validity of the items selected for measurement is the minimum psychometric requirement for measurement adequacy and is the first step in construct validation of a new measure (Schriesheim et al 1990). Content validity must be built into the measure through the development of items by adequately capturing the specific domain of interest of the study. There seems to be no generally accepted quantitative index of content validity of measures and therefore more dependence have to be placed on the theoretical considerations.

Rossiter (2002), introduced a more rational, content-validity based, expert judgment procedure in the form of the C-OAR-SE procedure. The C-OAR-SE procedure for measure development consists of six steps such as

1. Construct definition consisting : (1) the OBJECT to be rated, (2) the ATTRIBUTE on which it is to be rated, and (3) the RATER ENTITY, which is the person or group who does the ratings
2. Object classification and identification of constituents or components
3. Attribute classification and identification of components
4. Rater entity classification
5. Scale (item type and answer format) selection
6. Enumeration (scoring)

Finn and Kayande (2005), recommend that, if the C-OAR-SE procedure is used to develop scales for a construct, then empirical validation may be adopted using multivariate generalizability theory which is a
statistical theory for evaluating the dependability (or reliability) of measurements. Researchers have opinioned that no scale development procedure is perfectly complete or perfectly flawless. Hence, this study sought to incorporate the best practices of the top scholars in the marketing discipline into a procedure to develop scales for constructs with exceptional psychometric properties. Proper measurement can be guaranteed only by properly specifying the domain of the constructs (Churchill 1979), which will be easier, if the constructs are properly defined. A definition as per the C-OAR-SE procedure brings extra clarity to the concept and will help in item generation and purification. Hence this study attempted to define constructs based on the Object to be rated, the Attribute on which it has to be rated and the Rater Entity. The amalgamated scale development procedure as shown in Figure 3.4 is adopted in this study.

![Figure 3.4 Scale development process](image-url)
3.5 MEASUREMENT STRATEGY OF CONSTRUCTS

An event, category, behavior, or attribute that expresses a construct and has different values depending on how it is used in a particular study are called variables. This study focused on analysis of relationships between variables which are abstract and not directly measurable. Hence the concept of latent variables was adopted to explain the variables of interest in this study. Latent variables (LV) can be considered “hypothetical constructs invented by researcher for the purpose of understanding a research area” (Bentler 1980). Since LVs are unobservable and cannot be directly measured, researchers use observable and empirically measurable indicator variables (also referred to as manifest variables (MVs)) to estimate LVs in the model. Thus, the relationships can be analyzed between theoretical constructs, such as expectation, service quality, satisfaction and behavioral intentions, which are important to this study. These variables are constructs invented to explain phenomenon of interest in this study. The connections between the constructs and indicators or measures are referred as epistemic relationships or “rules of correspondence” (Bagozzi 1984). There are two basic types of relationships exist in causal modeling namely

- Reflective

- Formative

Constructs are usually viewed as causes of indicators, meaning that variation in a construct leads to variation in its indicators. Such indicators are termed “reflective” because they represent reflections, or manifestations, of a construct. The “formative” indicators are viewed as causes of constructs as construct is formed or induced by its indicators (Edwards and Bagozzi, 2000). A construct should be modeled as having formative indicators if the following conditions prevail:
• The indicators are viewed as defining characteristics of the construct,

• Changes in the indicators are expected to cause changes in the construct,

• Changes in the construct are not expected to cause changes in the indicators,

• The indicators do not necessarily share a common theme,

• Eliminating an indicator may alter the conceptual domain of the construct,

• A change in the value of one of the indicators is not necessarily expected to be associated with a change in all the other indicators, and

• The indicators are not expected to have the same antecedents and consequences.

On the other hand, a construct should be modeled as having reflective indicators if the opposite is true (Jarvis et al 2003). When the construct is complex, we should use higher order models because such models treat each dimension as an important component of the construct (Ruiz et al 2008). According to Chin (1998), the choice between measuring latent constructs with formative or reflective indicators should be based on the research objectives, the substantive theory for the latent construct, and the empirical conditions. Table 3.1 below explains the major difference between formative and reflective measurements.
The first step in developing a conceptual model linking customer expectation, service quality, customer satisfaction and behavioral intentions was to identify the variables having significant relation in the analysis of the relationship. The preliminary study produced an elaborative list of appropriate indicators from bank customer’s points of view. The analysis and results gave insights into the nature and structure of various constructs to be developed for the study.

**Table 3.1 Differences between formative and reflective measurements**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Formative Construct</th>
<th>Reflective Construct</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Definition</strong></td>
<td>A construct which consists of a composite of multiple measures</td>
<td>A construct which has observed measures that are affected by an underlying latent-unobservable variable</td>
</tr>
<tr>
<td>Characteristics of measurement</td>
<td>Un-correlated(Multi-dimensional)</td>
<td>Correlated/multi-collinear (uni-dimensional)</td>
</tr>
<tr>
<td>items(indicators)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relations between Construct and</td>
<td>Indicator change leads to Construct change</td>
<td>Construct changes affect the indicators as they are reflections of underlying construct</td>
</tr>
<tr>
<td>indicators</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Measurement error</td>
<td>At construct level</td>
<td>At indicator level</td>
</tr>
<tr>
<td>Mathematical equation</td>
<td>(Item)=Indicator weight*Construct+ Measurement error</td>
<td>Construct=factor loading 1<em>indicator1+ factor loading 2</em>indicator 2+.......+measurement error1+measurement error2+.......so on</td>
</tr>
<tr>
<td>Effect when an indicator(s) removed</td>
<td>May affect Content Validity</td>
<td>May not affect Content Validity</td>
</tr>
<tr>
<td>Internal Consistency (Cronbach alpha)</td>
<td>Not required-prove nothing</td>
<td>Required to prove convergent validity</td>
</tr>
<tr>
<td>Path diagram</td>
<td><img src="#" alt="Path diagram" /></td>
<td></td>
</tr>
</tbody>
</table>

Source: Review on Construct development by Hisham Bin Md-Bashir at http://doresearch.wordpress.com
The “Perceived service quality” and “Satisfaction” constructs were conceived as second order constructs and the corresponding first order constructs are explained under corresponding headings below. Each of these constructs were explained with theoretical considerations to develop a conceptual framework to represent the nomological network which represents the constructs with their observable manifestations and inter relationships

3.5.1 Perceived Service Quality (PSQ)

The main construct in this study was perceived service quality which was defined as the quality of service as perceived by the customers of retail banking context in Kerala (as per C-OAR-SE guidelines). In the preliminary study conducted as part of the research evaluated an elaborative list of dimensions considered in the previous studies on service quality. An attempt was made to shortlist these dimensions based on theoretical grounds with the help of an expert panel to represent the domain of service quality in the current banking context. The following classification was accepted as relevant to current retail banking context in terms of objectivity and purpose by the expert panel.

- Human related dimension
- Machine/system related dimension
- Convenience related dimension
- Product and Services related dimension
- Image related dimension
Justification for above classification is explained below.

Foundation of service quality construct lies in a set of dimensions or determinants. A number of researchers have provided lists of quality determinants, but the best known determinants were the classic five dimensions of service quality, namely, tangibles, reliability, responsiveness, assurance and empathy used in SERVQUAL instrument. Even when the SERVQUAL instrument has been widely used, it has been subjected to certain criticisms as well. The contention that service quality consists of five basic dimensions was according to some researchers questionable and they have suggested that SERVQUAL’s dimensions are contextual and not universally applicable (Ekinci and Riley 1999; Brown et al 1993; Cronin and Taylor 1992; Teas 1993; Gagliano and Hathcote 1994; Kang and James 2004; Lee 2005; Fowdar 2007). The number and composition of the service quality dimensions was probably dependent on the service setting (Brown et al 1993; Carman 1990). It has been suggested that for some services the SERVQUAL instrument needs considerable adaptation (Dabholkar et al 1996) and that items used to measure service quality should reflect the specific service setting under investigation. Hence it was necessary to modify some of the items and add or delete items as required (Carman 1990) to develop a new construct suited for the research settings.

Lovelock and Wirtz (2007), classified services along two axes, namely: “relative involvement of goods” ranging from pure services that are low on goods (consulting, insurance), services with some goods or delivered through goods (air travel, retailing, couriers, hotels, banking, maintenance) to services embodied in goods (music, books) and “degree of consumer-producer interaction”, from lower to higher. The service related to banking was figuring in medium goods and higher customer-producer interactions. In banking, consumers and service providers interact personally and the use of
goods remains at a medium level, whereas personal interactions are higher and therefore, the quality of service is determined to a large extent by human related aspects of service delivery. The classic dimensions in SERVQUAL such as responsiveness, reliability, assurance, and empathy mainly focus on the human aspects of service (Daniel and Berinyuy 2010). Surprenant and Solomon (1987) stated that service encounters are human interactions and suggested that customers and service providers have roles to play during and possibly after service encounters and that these roles are based on “interpersonal interactions” between organizations and customers. Moreover, Beatson et al (2008) found that perceived employee satisfaction, perceived employee loyalty, and perceived employee commitment influence perceived service quality. According to Zeithaml and Bitner (1996), contact employees represent the organization and can directly influence customer satisfaction. Considering above observations and on merit of literature review human related dimension was considered acceptable. This construct was defined as the quality of service offered by the people involved in service delivery to the customers in retail banking context in Kerala.

According to Gronroos (1984), perceived service quality consisted of two parts, technical quality and functional quality. Wetzels et al (2007) suggested that customer satisfaction can be increased by improving the functional and the technical quality of the service. Lassar et al (2000) found that the Technical / Functional Quality-based analysis of service quality is better suited to predict customer satisfaction than the SERVQUAL model in the private banking industry. A service encounter may result negative impression due to poor technical quality, as in modern banking technical quality has a vital role. A system failure or a non performance of an ATM can pose critical impact on overall customer satisfaction. Present day customer’s experience with the service encounter is mainly defined by the brief experience he is having with the bank’s systems and machines kept for
delivering service. The banking is classified among services which provide processing of information which requires the support of Information technology (Guo et al 2008). The emerging e-banking trends also support the inclusion of this dimension. Hence machine related dimension was finalized and was defined as the quality of service offered by the machines/systems involved in service delivery to the customers in retail banking context in Kerala.

The tangible attributes constitute the physical facilities and materials associated with the service. These tangibles provide convenience to customers in receiving service. The location of the banks and its ATM’s also are critical consideration to customers as these factors provide convenience to customers in reaching to service point. The convenience dimension (Siu and Cheung 2001; Maenpaa 2006; Kumar et al 2009) is significant factor that contributes to service quality by making it easy and comfortable for the customer to do business with their banks on a regular basis. This construct was defined as the quality of service perceived by the customers in the retail banking context of Kerala through facilities for the convenience of customers provided by the service providers.

The variety of service offer lies in the elaborate list of products and services offered by the banks. The product related dimension even though considered significant in may studies (Al-Hawari and Ward 2006; Sureshchander et al 2002; Bahia and Nantel 2000), in present day banking require careful attention as offering differentiation in this regard became difficult due to the fact that most of the banks are offering similar products and services at comparable costs. The retail banks have extended their product reach to asset management and insurance to boost revenues. The product dimension mostly focus on cross-selling more products to the existing client base in the current scenario. However this dimension merit
consideration as product mix may play an important role in providing a competitive advantage and improve the performance of banks (Berger and Mester 2003). Also variation in product line compared to other banks can cause dissatisfaction among customers. This construct was defined as the quality of service perceived by the customers in the retail banking context of Kerala through variety of products and services offered by the service providers.

Another dimension suggested by expert panel as a critical factor was corporate image related dimension. Corporate image and corporate reputation are in the eyes of the beholder. Image is the mental picture that people have of an organization, whereas reputation constitutes a value judgment (Treadwell and Harrison 1994) about the organization’s attributes. Marken (1990) explained corporate image as the “perceived sum of the entire organization, its objectives and plans and encompasses the company’s products, services, management style, communication activities, and actions around the world”. The globalization trends coupled with rapid technological changes posed significant variation in customer requirements in the banking industry. The constant changes experienced within the banking industry have led not only to intense competition among the banks but also to an identity crisis (Bloemer et al 1998). Hence the image perceived by customers became a critical dimension. The image dimension emerges as the only option for the consumers to differentiate among banks in future (Sunter 1993). Attributes such as Honesty, trustworthiness, security and social commitment generally impart positive image for the bank. This construct was defined as the quality of service perceived by the customers in the retail banking context of Kerala through positive impact of the image attached to the service providers.
In this study service quality was conceptualized as a multidimensional and hierarchical construct as proposed by Brady and Cronin (2001). The most popular concept regarding measurement of latent variables considered in a study was usage of reflective indicators assuming changes in the latent variable are reflected (i.e. manifested) in observable indicators (Hogan and Martell 1987, Morrison 2002). However in many cases the latent variables are formed by the joint influence of indicators (MacCallum and Browne 1993, Jarvis et al 2003). Automatic acceptance of reflective indicators (Diamantopoulos and Winklhofer 2001), for specifying measurement models, consequently ending up with misspecification (Jarvis et al 2003) was avoided in this study by defining the construct correctly on theoretical strength and by select the indicators capable of measuring the constructs in best manner as either formative or reflective.

Perceived Service quality was conceptualized as a second order dimension formed from five first order (latent) dimensions mentioned above. The first order latent dimensions were measured using reflective manifested indicators capable of capturing the domain on interest related to the corresponding construct. A 28-item instrument was developed for measuring the latent dimensions and was later on subjected to factor analysis to re-confirm the existence of five distinct factors.

3.5.2 Desired Expectation

Desired expectation was defined as the desired level of service as expected by the customers in the retail banking context in Kerala. In this study desired expectation was conceptualized as reflective in nature and 9 manifested indicators were used to measure this latent construct. “Desired Expectation” construct explained various aspects of banking where the customer has desired expectations and hence indicators that reflect the theme of the construct were used
3.5.3 **Expectation Developers**

Expectation developers are defined as antecedents which form reasons for the development of desired level of service expectation to the customers of retail banking context in Kerala. The construct of “expectation developers” used in this study was assumed to be formed of indicators related to service promises by providers, word of mouth feedback from others, needs and familiarity of the customer (Parasuraman et al, 1994). The influence of all these indicators results in the formation of the latent construct and removal of any of the indicator may change the structure of the construct. This observation was the logic behind defining this construct as formative.

3.5.4 **Customer Satisfaction**

This construct was defined in this study as the feeling of pleasure or disappointment felt by the customers of retail banking context in Kerala due to the impact of factors such as satisfaction developers, satisfaction retainers and satisfaction reducers pertaining to banking context. The construct of Customer satisfaction was mostly conceptualized as multidimensional construct (Irina Bena, 2010; Manrai and Manrai, 2007; Westbrook and Oliver, 1991; Oliver and Swan, 1989; Sureshchander et al, 2002) explaining different facets of satisfaction in the literature. In every service context, customer satisfaction occurs as the net result of impacting factors capable of developing, retaining and reducing satisfaction. The ability of service quality dimensions in developing customer satisfaction was established beyond further debate. The cultivation of trust (Geyskens et al, 1996), perceived value (Anderson and Mittal, 2000) and consistency in service delivery (Enrique Bekerman, 2003) when acts in harmony with satisfaction developers, better results are guaranteed and customer satisfaction gets
The researcher felt that surprise offers such as interest holiday, special rates etc will help to retain satisfaction. Hence an indicator to understand the response of customers to such a strategy was included in the measurement. A set of factors similar to “Hygiene” (Hertzberg 1959) factors were assumed to act as satisfaction reducers in the banking context. These factors such as bank performance, industry concerns and delay in technological up gradations have to be properly managed to avoid dissatisfaction in the banking context. The indicators used to measure each of the above sub dimensions were measured using indicators that are not expected to be related or internal consistency is not expected as each of them explain different aspects of measurement. Also removal of one item will adversely affect the theoretical assumption behind the conceptualization.

On this logic, the construct of “Customer Satisfaction” was also measured as multidimensional hierarchical construct with both first order and second order in the formative manner. The first order formative dimensions were satisfactions developers, retainers and reducers as explained above which together causes the total satisfaction among customers.

Thus customer satisfaction was developed as multilevel, multi-dimensional construct formed from following minor constructs.

- Satisfaction developers
- Satisfaction retainers
- Satisfaction reducers

Satisfaction developers were defined as attributes of service quality which formed reason for developing satisfaction among retail banking customers in Kerala. Satisfaction retainers were attributes which form reason for retaining satisfaction among retail banking customers in Kerala.
Satisfaction reducers were defined as concerns and unpleasant happenings which attempt to reduce satisfaction among retail banking customers in Kerala. It may be noted that absence of reducers may not enhance satisfaction whereas existence of these factors will certainly affect the satisfaction of customers (Tigineh Mersha and Veena Adlakha 1992). Customer satisfaction was assumed as a second order construct formed by these first order latent variables. To measure these latent constructs formative constructs with indicators as shown below were used (Table 3.2).

**Table 3.2 Constructs and indicators used in Customer satisfaction**

<table>
<thead>
<tr>
<th>Construct</th>
<th>Indicator variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>Employee interaction quality, technical quality,</td>
</tr>
<tr>
<td>Developers</td>
<td>facilities for convenience, product mix, image</td>
</tr>
<tr>
<td></td>
<td>perception</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>Development of trust, value perception, consistency</td>
</tr>
<tr>
<td>Retainers</td>
<td>in service quality, surprise offers</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>Profitability concerns, concerns of industry, delay</td>
</tr>
<tr>
<td>Reducers</td>
<td>in technological up-gradations</td>
</tr>
</tbody>
</table>

**3.5.5 Behavioral Intentions**

In this study, the construct for behavioral intentions was considered as formed by indicators pertaining to following behavioral patterns. This construct was defined as various behavioral patterns exhibited by the customers of retail banking context in Kerala on their interaction with the services offered by the banks. The behavioral intentions considered in this study were

- positive word of mouth,
- loyalty,
- switch over
- complaint

Responses pertaining to positive word of mouth and loyalty were used to measure positive behavioral intentions and the other two were used to measure negative behavioral intentions in this study. The constructs of positive behavioral intentions and negative behavioral intentions were treated as formative in measurement. The demographic factors considered for the study included age, sex, qualification, income and length of relationship with the bank.

3.6 RESEARCH MODEL

The extended developed for the study is given in Figure 3.5. ‘R’ denotes constructs conceptualized in reflective manner and ‘F’ denotes constructs conceptualized in the formative manner. The constructs of “Image”, “Human”, “Convenience”, “Products and Service”, “System” and “Desired Expectation” were defined as reflective constructs. The constructs of “Expectation Developers”, “Satisfaction Developers”, “Satisfaction Retainers”, “Satisfaction Reducers”, “Positive Behavioral Intentions” and Negative Behavioral Intentions were defined in the formative manner in this study. The constructs of Perceived Service Quality and Customer Satisfaction were developed as multilevel, hierarchical formative constructs with first order dimensions as illustrated. The direction of the arrow represents the causality assumed among constructs. Each path between constructs in the research model was conceptualized as hypotheses to be tested in this study.
3.7 HYPOTHESIS DEVELOPMENT

“A hypothesis is a conjectural statement of the relation between two or more variables” (Kerlinger 1956). “A hypothesis can be defined as a tentative explanation of the research problem, a possible outcome of the research, or an educated guess about the research outcome.” (Sarantakos 1993). Hypotheses developed for this study were derived from the belief formulated during the literature review process.

According to Preece (1994), "a good hypothesis is not just any old assertion which can form the basis of a good discussion, though the term is often used in this way." He noted that a good hypothesis has four requirements:

- It should contain two concepts;
- It should propose a relationship between them;
• The concepts used must be capable of being reduced to a level where they can be measured objectively, or at least recognized consistently.

• It should always, or nearly always, relate to an existing wider body of knowledge or theory.

In this study various hypotheses were proposed based on the conceptual model developed for the study.

Parasuraman et al (1991), claimed that customer assessments of service quality arise from a comparison of service expectation with actual performance. In customer satisfaction studies, expectations are accepted as a consumer forecast of performance or service outcomes (Parasuraman et al 1988; Oliver 1993; Zeithaml et al 1993). The use of expectations as a basis for conceptualizing service quality has given rise to numerous criticisms. Cronin and Taylor (1992), and Teas (1993), among other authors, argue that it is useless to recur to use expectations, in an attempt to measure service quality, and that only perception should be used. Similarly there was no consensus available on how to measure expectations. Influence of certain factors on expectation was studied by many researchers. The SERVQUAL authors listed word-of-mouth communication between customers, the personal needs of customers, past experiences of customers and the external communications from service providers as precursors of customer expectations. Millson-Martula and Menon (1995), opined that “needs” are important in forming expectations. Expectations were formed as a result of the experience (Lilley and Usherwood, 2000). Expectations are likely to change with familiarity (Carman 1990). Philip J. Calvert (2001), identified Past experience of the customer, Word-of-mouth from other customers, Personal needs of the customer, National culture of the customer, Communications (direct and indirect) about what the customer can expect and
Service provided by other providers that acts as factors influencing expectations. The Researcher felt that these factors are expectation developers which influence the desired expectations of the customer, perceived service quality and satisfaction. Hence the following Hypotheses were proposed

**H1a** - There exists a significant relation between Expectation Developers and Desired Expectations of the customer

**H1b** - There exists a significant relation between Expectation Developers and Perceived Service Quality in the banking context

**H1c** - There exists a significant relation between Expectation Developers and Customer Satisfaction in the banking context.

The desired expectations of the customer are generally related to technical, personnel and other related parameters to which a customer normally interact in every service encounter. Customer desires and expectations provides a comparison standard for perceived service quality and customer satisfaction (Khalifa and Liu 2003). Hence following hypotheses are proposed

**H2a** - There exists a significant relation between Desired Expectations of the customer and Perceived Service Quality in the banking context

**H2b** - There exists a significant relation between Desired Expectations of the customer and Customer Satisfaction in the banking context
A sound measure of service quality was necessary in identifying the critical aspects of service which need evaluation and improvement. This study attempted to develop a service quality scale specifically for retail banking in Kerala. Previous researches identified a large number of dimensions capable of measuring service quality. In this study, responses pertaining to 28 indicators covering dimensions finalized as cited in sec3.5.1 were subjected to exploratory factor analysis followed by confirmatory factor analysis for being included in the measurement of service quality. The finalized dimensions were human, system, convenience, product and image. The study aimed to verify the significance of these dimensions to perceived service quality in the banking context. Hence the following Hypotheses were proposed

H3a - There exists a significant relation between Image dimension and Perceived Service Quality in the banking context

H3b - There exists a significant relation between Human dimension and Perceived Service Quality in the banking context.

H3c - There exists a significant relation between Convenience dimension and Perceived Service Quality in the banking context

H3d - There exists a significant relation between Product and Services dimension and Perceived Service Quality in the banking context

H3e - There exists a significant relation between System dimension and Perceived Service Quality in the banking context
In this study, it was assumed that customer satisfaction is formed from satisfaction developers, retainers and reducers in the banking context. Hence the following hypotheses were proposed:

**H4a -** There exists a significant relation between Satisfaction Developers and Customer Satisfaction in the banking context.

**H4b -** There exists a significant relation between Satisfaction Retainers and Customer Satisfaction in the banking context.

**H4c -** There exists a significant relation between Satisfaction Reducers and Customer Satisfaction in the banking context.

In the banking, customers come to the bank with certain expectations and exceeding these expectations results in a high level of satisfaction, loyalty and recommendation at the same time falling short of these expectations will end up with the complaints or switching tendency. Dabholkar et al (2000) also found that customer satisfaction strongly mediated the effect of service quality on behavioral intentions. The power of perceived service quality to predict customer satisfaction (Anderson and Sullivan 1993; Cronin and Taylor 1992; Spreng and Mackoy 1996; Woodside et al 1989) was empirically tested in prior studies. Therefore the following hypothesis is proposed:

**H5 -** There exists a significant relation between Perceived Service Quality and Customer Satisfaction.
In the study of customer Satisfaction and service quality, role of behavioral intentions were considered as important outcome that decides profitability of the firm. These intentions are clear indicators that show whether the customer will continue with or leave the firm. It was also assumed that, in the absence of a direct link between perceived service quality and behavioral intention, customer satisfaction can be considered as a mediator that interferes with the relationship (Bou et al. 2001; Woodside et al. 1989). This reasoning was based on considering the antecedent role of satisfaction and service quality in development of behavior intentions (Cronin and Taylor 1992; Dabholkar and Thorpe 1994; Oliver and Swan 1989). The behavioral intentions can be positive or negative and each type of behavioral intentions should be analyzed in different perspective to develop strategies to retain customers. This was the basis of rationale behind for deciding hypotheses 6 and 7.

H6a - There exists a significant relation between Perceived Service Quality and Positive Behavior Intentions.

H6b - There exists a significant relation between Perceived Service Quality and Negative Behavior Intentions

H7a - There exists a significant relation between Customer Satisfaction and Positive Behavior Intentions.

H7b - There exists a significant relation between Customer Satisfaction and Negative Behavior Intentions

The demographic factors related to the customer were expected to have influence on the service quality perception and satisfaction in every customer studies. A recent study conducted in India that examined linkage among demographic factors such as social status, income level, age, occupation and length of association towards SERVQUAL dimensions,
identified that no significant association existed between them except income level and Empathy dimension (Vijay and Selvaraj 2012). Hence the following hypotheses were proposed to be tested to verify the influence of factors such as sex, age, education and income of the customers, Type of bank and length of association with the bank.

H8 - There exists significant relation between Perceived Service Quality and Customer Satisfaction with Sex, Age, Education and Income of the customers

H9 - There exists significant relation between Perceived Service Quality and Customer Satisfaction with Type of bank and length of association with the bank.

The model explaining all the hypotheses proposed in the study are illustrated in Figure 3.6.

**Figure 3.6 Research Model explaining Hypotheses proposed in the study**

The details of all constructs, its nature and indicators are furnished below in Table 3.3.
Table 3.3 Details of all constructs and indicators

<table>
<thead>
<tr>
<th>Construct</th>
<th>Nature of construct</th>
<th>Indicators (No. of indicators)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived SQ</td>
<td>Formative</td>
<td>Image, human, convenience, prd&amp;services, system(5)</td>
</tr>
<tr>
<td>Human</td>
<td>Reflective</td>
<td>Confidence inducing behavior, communication skills, listening, knowledge, technical skills (5)</td>
</tr>
<tr>
<td>System</td>
<td>Reflective</td>
<td>Modern equipments, well maintained ATM’s, up to date website, secured web site, system accuracy, E-banking consistency, easy to use(7)</td>
</tr>
<tr>
<td>Convenience</td>
<td>Reflective</td>
<td>Easily accessible ATM’s, convenient branch locations, good infrastructural facilities, easiness to get statements/cheque books etc(4)</td>
</tr>
<tr>
<td>Product</td>
<td>Reflective</td>
<td>Appealing products and services, reasonable products and services, useful products and services (3)</td>
</tr>
<tr>
<td>Image</td>
<td>Reflective</td>
<td>Trust, honesty, social responsibility, helpful, clear policy, communication clarity, commitment, punctual, acceptance of customer value (9)</td>
</tr>
<tr>
<td>Expectation developers</td>
<td>Formative</td>
<td>Service promises, word of mouth, needs, past experience (4)</td>
</tr>
<tr>
<td>Desired expectation</td>
<td>Reflective</td>
<td>Helpful employees, knowledgeable employees, easy transactions, safety, privacy, punctual, speedy decisions, system consistency, immediate grievance redressal(9)</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>Formative</td>
<td>Satisfaction developers, satisfaction retainers, satisfaction reduces.(3)</td>
</tr>
<tr>
<td>Satisfaction developers</td>
<td>Formative</td>
<td>Employee interaction quality, technical quality, facilities for convenience, product mix, image perception (5)</td>
</tr>
<tr>
<td>Satisfaction retainers</td>
<td>Formative</td>
<td>Development of trust, value perception, consistency in service quality, surprise offers (4)</td>
</tr>
<tr>
<td>Satisfaction reducers</td>
<td>Formative</td>
<td>Profitability, concerns, delay in technological up gradations(3)</td>
</tr>
<tr>
<td>Positive Behavioral Intentions</td>
<td>Formative</td>
<td>Positive WOM, loyalty(2)</td>
</tr>
<tr>
<td>Negative Behavioral Intentions</td>
<td>Formative</td>
<td>switch, complaint(2)</td>
</tr>
</tbody>
</table>
3.8EXPECTED OUTCOME OF THE STUDY

It was expected that the conceptual model developed will help in establishing the linkage between the variables such as customer expectation, service quality, customer satisfaction and behavioral intentions. The analysis may provide an insight into the customer thinking process and will help in formulating strategies to influence the target customers. It was expected that the hypotheses proposed will be accepted establishing the relationship between the variables under study. The expected impact of the proposed model was its effectiveness in explaining the factors contributing to the customer satisfaction and related behavioral intentions in the banking context. The study will help in identifying critical dimensions of service quality that contribute to sustainable improved productivity and profitability through customer satisfaction. The expected outcome was to identify actions and develop innovative strategies to understand and manage customer expectations for enhanced customer satisfaction resulting in favorable behavioral intentions. In modern banking practices the significance of systems and machines are considered as an important constituent contributing to service quality and customer satisfaction. It was expected that that the increased importance of E-banking, and its relevance in developing immediate behavioral intentions can be explained with the help of the outcome of the study. In this study satisfaction was measured using multiple parameters and it was expected that relative importance of these parameters can be understood by the study. The study was expected to produce results corroborative with the finding of earlier researches conducted in the field of service quality.