CHAPTER 4

RESEARCH MODEL FRAMEWORK

The studies on Passenger loyalty /Customer loyalty have produced substantial insights into the relative roles of antecedents in the formation of loyalty and indicated that all these loyalty decisions consist of a sequence of judgments or assessments. The theoretical justification of the two independent variables selected for the study namely service quality and service satisfaction and their relevance to the dependent variable, service loyalty, is explained in this chapter.

4.1 SERVICE QUALITY

During the past 20 years, considerable academic attention has been paid to establishing that services differ from products, and this difference should be taken into account in the marketing of services (Gabbott and Hogg 1997). Definitions of services have been proposed since the 1960s, but there are still differing views on how they should be defined. Gronroos (2000) defines a service as “A process consisting of a series of more or less intangible activities that normally, but not necessarily always, take place in interactions between the customer and service employees and / or physical resources or goods and / or systems of the service provider, which are provided as solutions to customer problems”.

Services in general can be characterized as either episodic or relational (Liljander and Strandvik 1995). Episodic service is a discrete service which forces the customer to make a separate decision each time the service is purchased. Relational service, on the other hand, are continuous since the customer makes some kind of contract for the service delivery with the service provider. Airline services are clearly episodic in nature.
A significant gap exists in services literature in explaining the relationship between Use of Technology, Productivity and Service Quality. The link between the three constructs has not been systematically investigated.

Service Quality (SQ) is usually defined as the customer’s impression of the relative superiority or inferiority of a service provider and its services (Bitner and Hubert, 1994) and is often considered similar to the customer’s overall attitude towards the company (Parasuraman et al 1988, Zeithaml 1988, Bitner 1990). Researchers have tried to conceptualize and measure Service Quality and explain its relevance to the overall performance of companies and organizations.

A common notion of research on SQ is that because services are intangible, heterogeneous, and their production and consumption are usually inseparable, the process used by customers to evaluate SQ is exceptionally composite and cannot be easily identified. The idea that services are evaluated both by the outcome and by the production and delivery process is commonly accepted. Gronroos (1982) considers services as products requiring, to a large extent, the customer’s involvement in the process of production and consumption during which time the consumers compare their expectations about the service with what they actually receive. The result of this comparison perceived as service quality, Gronroos (1982) suggested that the customers’ expectations are also influenced by marketing activities, external influence and word-of-mouth. He identified two types of service quality; “technical”, related to what the customer gets from a service and “functional”, associated with how the service is delivered.

The last two decades have witnessed great changes in the business environment, with Quality consistently being considered as one of management’s top most competitive priority and a prerequisite for sustenance and growth. The quest for quality improvement has become a highly desired objective in today’s intensely competitive global market place. Quality management has been reckoned as the prime over for enhanced business performance (Corbet et al., 1998). In today’s
world of fierce competition, rendering quality service is a key for subsistence and success. Hence it is important to ascertain the customer’s perception of Service Quality and subsequently develop strategies to meet customer expectation. Also, the service organizations have learned that Quality does not improve unless it is measured.

4.1.1 Definitions of Service Quality

The below is a substantial collection of definition of Service Quality as told by various authors.

1. “It is the result of the comparison that customers make between their expectations about a service and their perception of the way the service has been performed.” (Lewis and Booms 1983)
2. “It is a form of attitude, related but not equivalent to satisfaction, and results from a comparison of expectation with perceptions of performance”. (Gavin 1984)
3. “Perceived judgment resulting from an evaluation process where customers compare their expectations with the service they perceive to have received”. (Gronroos 1984)
4. “Comparative function between consumer expectations and actual service performance”. (Parasuraman et al 1985)
5. “Consumers belief regarding services received”. (Parasuraman et al 1985)
7. “A global judgment or attitude, relating to the superiority of the service”. (Parasuraman et al 1988)
8. “The customers’ judgment about an entity’s excellence or superiority and it is a form of attitude and results from a comparison of expectations with perception and performance”. (Parasuraman et al 1988)
9. “Consumers judgment about the excellence or superiority of a service provider’s performance”. (Babakus and Boller 1992)
10. “Comparison to excellence in service encounters by the customers”. (Rust and Oliver 1994)
12. “Assessment of attributes related to service process such as responsiveness, awareness, assurance and empathy” .(Dabholkar and Overby 2003)

4.1.2 Service Quality as an Antecedent of Service Loyalty

A major approach to the study of service loyalty behavior is the identification of antecedents or the key determinants or drives of service loyalty. Service researchers are increasingly giving serious attention to the study of service quality and its role in the services business operations. A number of studies have identified the significant association of service quality with service loyalty in the service literature (Parasuarm et al, 1996, Anderson1998).

Service quality has been regarded as an attitude (Bolton and Drew, 1991), Icaobucci, 1889, Parasuraman et al, 1998). Hence researchers have logically attempted to draw a link between service loyalty as an antecedent to behavioral intentions such as customer retention (Bansal & Tayler, 1999; Keavency, 1995; Roos, 1999; Singh, 1990), advocacy intentions (Anderson, 1998; Zeithaml et al., 1996) and price sensitivity (Anderson, Fornell and Lehman, 1994; Rust et al., 1995). These conceptual foundations stem form the works in social psychology (Fullerton and Taylor, 2002) and explain the reasons why managers in service industry expect that service quality improvement endeavours will enhance customer / passenger loyalty.

The recent marketing literature has presented empirical evidence for the relationship between service quality and service loyalty intentions with the most common finding that satisfaction mediates their relationship (Cronin, 2000; Cronin and Taylor, 1992; Goltileb et al, 1994; Spreng and Singh, 1993). There is a growing consensus on the sequential order of service quality and service satisfaction (Boelmer et al, 1998). Based on the empirical evidence provided by Cronin and
Taylor in respect of reciprocity between satisfaction and quality across several industries, the service quality can be clearly seen as a determinant of service satisfaction, which influences purchase intentions.

Two agreements surface from the growing body of literature related to service quality and service satisfaction (Dabholkar, 1995). First, service quality and service satisfaction are conceptually distinct but closely related constructs. Second, service quality is primarily cognitive, left brained, evaluative and objective concept where satisfaction is a combination of an effective, right brained, evaluative, feelings based and subjective component (Shemwell et al., 1998). Some researchers (e.g. Oliver, 1993) argue that the affective and feelings based component of satisfaction is more important than the cognitive component of service quality since it is the set of feelings that keep one committed to the service provider. Leading service organizations strive to maintain a superior quality of service I an effort to gain customer loyalty. (Zeithaml, 1996). Despite the fact that that service quality is an eventual fit for business survival (Reichheld, 1993) the relationship between service quality and service loyalty remained relatively underdeveloped (Bloemer et al, 1999; Gremler and Brown, 1996). While loyalty is presented as an outcome variable in service quality models, the link between the individual dimensions of service quality and service loyalty received very little attention especially in the context of Indian domestic airline context. Assessment of this link between service quality and service loyalty dimensions will necessarily help in measuring, controlling and improving service quality from the passengers perspective.

4.1.3. Attributes of Service Quality

Service quality in literature has been conceptualized (e.g. Parasuraman et al., 1988) as attributes related to assessment in a service encounter or at large, service consumption. The majority of studies testing Service quality follow this approach (e.g. Babakas and Boller, 1992; Brown and Swartz, 1989; Cronin and Taylor, 1992). Gronroos (2000) in his recent book suggested that in managing service
quality, the firm should manage six process criteria in order to ensure favourable service quality perception. Thus, there seems to be a wide acceptance of the point that service quality is an evaluation of process factors.

Parasuraman et al. (1998) pointed out service quality as a measure of comparison based on the difference between a consumers expectations of service and consumers perception of actual performance. (e.g. Bottona and Drew, 1991a, 1991b; Churchill and Suprenant, 1982; Cronin and Taylor, 1992, 1994). Among them, the work of Cronin and Taylor (1992) using SERVPERF as an alternate to the gap model of measuring service quality, has been extended by many, notable among them is the study conducted by Brady, Cronin and Bond (2002), in discarding disconfirmation paradigm.

Much research has been focused on how service quality perceptions should be measured (e.g. Brady and Cronin, 2001). Most research stems form Parasuraman, Zeithaml and Berry’s (1985) work in which they applied gap analysis to the area of services and derived the idea of perception gaps or gaps that occur between the service firms perception of quality provided and the customers perception received. (Laroche et al., 2004). This gap model is based on the disconfirmation paradigm that was originally used in the product literature (Churchill and Suprenant, 1982) that resulted in the well known SERVQUAL model (Parasuraman, Zeithaml and Berry, 1988).

Different forms of behavioural consequences of service quality have been identified and examined in the service marketing literature. These include customer retention and repurchase intentions. While most of the work in the area focused on the repurchase intentions (Brady et al., 2002; Taylor and Baker, 1994) researchers have started focusing on the multiple consequences of service quality. Therefore in line with the extant literature, in this study, the impact of service quality on service loyalty as antecedent is extensively investigated.
The major reason behind the choice of service quality as the first variable in the study is satisfaction which is a rating of customer experience with the service outcome, where quality is a judgement made about a firms resources and skills. (Mittal and Lassar, 1998). The other reasoning for considering service quality as the first and foremost antecedent of loyalty is that, service quality rating clearly tells one the state of service providers resources and actions(cognitive assessment and hence more enduring in nature), whereas satisfaction rating tell one about the state of consumer(affective in nature) which is purely a consequence of service quality perceptions only. Moreover, in order to give guidance to managers as to what should be improved in attaining customer loyalty, only service quality tells us what aspects are below the expected level and need improvement.

Another approach to service quality was proposed by Gronroos (1990) and it consists of two dimensions namely i) Technical quality and ii) Functional quality. Service quality is assessed based on primarily what is delivered e.g. effectiveness of car repair; cleanliness of a room in a hotel etc. The assessment relies upon functional quality, that is, how the services is delivered, the care and manner of delivery personnel. Though this approach to explaining service quality is unique and clearly delineates service quality from service satisfaction this has got gained as much as universal acceptance as SERVQUAL for the reasons largely untested, although both the perspective represent a substantial accumulation of marketing research.

Service quality is the function of perceptions, expectations and performance. Early writing on the topic of service quality defines service quality as a comparison of what customers feel a service provider should offer (their expectations) with how the provider actually performs (Gronroos, 1982). Parasuraman et al. (1985) defines service quality as perceived by customers, as the degree and direction of discrepancy between customers service perceptions and expectations i.e, P-E (Performance – Expectations). It is also defined as difference between technical quality (what is delivered) and functional quality (how it is delivered) and as process quality (judged during the service) and output quality (judged after the service) (Gronroos, 1983).
The concept of liberalization and globalization opened the market to intense competition throughout the world. So, today the customers/passengers are not ready to buy or travel in a product or a transport based on its physical characteristics, brand name or price alone. The purchase is made mostly on passengers perception of quality attached to a transport operator. This passenger focused definition of quality is said to have grown out of the service marketing literature (Gronroos, 1983, Parasuraman et al., 1985). By this, we can rightly say that quality is the vital aspect for a product. Everybody started to give quality offerings to survive in the intense competition. So there needs a change from product quality to have an edge over competitors, and thus came into existence the concept of service quality.

4.1.4. Service Quality Models

In this tough business environment, measurement of SQ has created interest among the service providers and scholars alike. This is so because, SQ is used by marketers to position their respective products in the market place. (Brown and Swartz 1994). Over the years various SQ models have been developed to measure the Quality of services. The following table gives a list of various SQ models.

Table 4.1 Various Service Quality Models

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<th>Model</th>
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<td>The Nordic Model</td>
<td>Gronroos</td>
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<td>The SERQUAL model A</td>
<td>Parasuraman et al</td>
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<td>The SERQUAL model B</td>
<td>Parasuraman et al</td>
<td>1988</td>
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<td>The SERVPREF model</td>
<td>Cronin and Taylor</td>
<td>1992</td>
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<td>The three component model</td>
<td>Rust and Oliver</td>
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<td>The CARTER model</td>
<td>Othman and Owen</td>
<td>2001</td>
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<td>The three order factor model</td>
<td>Brady and Cronin</td>
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<td>The Human Societal Element Model</td>
<td>Sureshchander et al</td>
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There has been considerable progress in the literature as to how SQ perceptions should be measured (e.g., Babakus and Boller 1992, Cronin and Taylor 1992, Teas 1993) but little advances as to what should be measured. The researchers have generally adopted one of the two conceptualizations. The first if the “Nordic” perspective (Gronroos, 1984), which defines the dimensions of SQ in global terms as consisting of functional and technical quality. The second, the “American” perspective (Parasuraman et al., 1988), uses terms that describe service encounters (i.e., reliability, responsiveness, empathy, assurance and tangibles). Although the later conceptualization dominates the literature, a consensus has not evolved as to which is the more appropriate approach.

The foundation for SQ literature lies in the product quality and customer satisfaction literature. Early conceptualization (Gronroos 1984, Parasuraman et al 1985) are based on the disconfirmation paradigm employed in the physical goods literature (e.g., Cardozo 1965, Howard and Seth 1969, Olshavsky and Miller 1972, Oliver 1977, Churchill and Supernant 1983, Oliver 1983). This suggests that Quality results from a comparison of perceived with expected performance.

Three themes are evident in more recent work on SQ. First, several studies suggests modified versions of SERVQUAL model proposed by Parasuraman et al. (1988). Cronin and Taylor (1992); Boulding et al. (1993); DeSabro et al. (1994) have attempted to provide modified versions. These modifications either drop expectation or dimensions to expectation such as “will” and : should “ or employ alternative methods such as Conjoint analysis to assess SQ perceptions.

The second uses two forms of Quality approach. Gronroos (1984) postulated that there is technical and functional dimension to SQ. In support of this theme, Rust and Oliver (1994) offered a three component model consisting of the service product, the service delivery and the service environment. Rust and Oliver have tested their model empirically, though there has been support for similar models in retail Banking (McDoughall and Levesue 1994) and health care industry (McAlexander et al 1994).
The third theme relates to the structure of SQ construct. Dabholkar et al (1996) identified and tested a hierarchical conceptualization of SQ that proposes three levels: (1) Customers’ overall perception of SQ (2) Primary dimensions and (3) Sub-dimensions. This multi level model recognizes the many facets and dimensions of Service Quality perceptions. SQ is considered as higher order factor that is defined by two additional levels of attributes.

Thus, SQ has been defined as a customer’s perception regarding (1) an organization’s technical and functional quality; (2) the service product, the Service deliver and the service environment; or (3) the reliability, responsiveness, empathy, assurances and tangibles associated with a service experience.

4.1.5 The Nordiac Model

Early contribution to the literature of SQ model has been developed by Gronroos in 1984 called the Nordic Model and it has conceptualized the measurement of SQ as customer’s perception regarding an organizations’ technical and functional quality. Technical Quality refers to primarily what is delivered as service and functional quality refers to primarily how the service is delivered. Examples of Technical quality are Cleanliness of the seats in the aircraft, effectiveness of car repair etc., and Functional quality are the care of the crew members, the manner in which the service provide helped a customer in the airport during luggage check-in etc.

The Nordic model of SQ measurement is criticized on the following aspects; it gives only generalized picture of SQ and lacks detail. For example, it does not talk much about service tangibles and service encounters.

4.1.6 The SERVQUAL Model A

In 1985, Parasuraman et al have pioneered the ever debated and challenging aspect of measuring Service Quality, popularly known as SERVQUAL model. They had started the unending journey of conceptualizing the measurement of SQ with
ten SQ dimensions. It was later filtered and refined to five SQ dimensions, namely, tangibles, reliability, responsiveness, assurance and empathy. Even today, research adopt the model developed by these pioneers to measure SQ in different service settings.

4.1.7 The SERVQUAL Model B

Again in 1988, the same set of three researchers, namely Parasuraman et al. further refined and fine tuned the five major dimensions by changing the statements to get more reliable and valid results for SERQUAL model. All new models are prone to criticism, similarly the SERQUAL model has been widely criticized by different authors in different service settings. Researchers allege that it is limited to one sector such as a banking sector and the score is biased because of the wrong terminologies used in the statements. Mostly, the model has been criticized for the psychometric properties and methodological soundness. In 1993, Cronin and Taylor commented that it is unnecessary to measure customer expectation in SQ research. They contended that measuring perceptions of performance alone is sufficient.

4.1.8 The SERVPREF Model

The strong critiques of SERQUAL model were offered by Cronin and Taylor, who had developed a new model in 1992, popularly called SERVPREF model. Their conceptualization of SQ is based on the performance component alone. They proposed the SERPREF model which is based on Performance Satisfaction model. They have reduced the number of items to be measured but they have used the same dimensions. The SERVPREF is also criticized on the precise that is used and tested only in developed nations.

4.1.9 The Three -Component Model

During 1994, Rust and Lover modified and extended the Nordic model into three component model. The measurement of SQ is conceptualized as the customers’ perception about an organization’s service product, service deliver and
service environment. The criticism leveled against Rust and Oliver’s model is that it has omitted several important elements of SQ and gives only a generalized picture of SQ.

4.1.10 The Carter Model

The CARTER model of measuring SQ was developed by Othman and Owen, in 2001. They conceptualized a proposed framework for measuring SQ in Islamic banks and the dimensions considered were: Compliance, Assurance, Reliability, Tangibility, Empathy and Responsiveness. The CARTER model was the first to mix customers religious beliefs and values with other quality dimensions. It links Quality with customer’s satisfaction and service encounter. This model has been appreciated for its systematic and well documented approach.

4.1.11 The Three-Order Factor Model

The Three-order factor model was developed by Brady and Cronin (2001). This model conceptualized the measurement of SQ on the basis of three main dimensions, which is taken from the Nordic model, the three component model and it also has nine sub-dimension and three descriptors taken from SERVQUAL scale. The three main dimensions of SQ considered are Interaction quality, Environmental quality and Outcome quality. The nine sub-dimensions considered are Attitude, Behavior, Expertise, Ambience, Design, Social factors, Waiting time, Tangibles and Valence. The three descriptors are Reliability, Responsiveness and Empathy. The criticism of this model is that it has been used in only few service settings.

4.1.12 The Human-Societal Element Model

The Human-Societal Element model was developed by Suresh chander et al in 2002 with a view to overcome the drawbacks in SERVQUAL model. The SERVQUAL model did not address certain important aspects of SQ such as core service and standardization of Service delivery. This model conceptualizes SQ
model based on the following five dimensions; Core service or service product, Human element of service delivery, Systematization of service delivery, Tangibles of service and social responsibility. The criticisms of this model are as follows: the study has been confined to Banking industry only and that too by collecting data from customers of Banks in developing economies and not developed economies.

From the discussion of all the various models, it is clear that no one model had obtained global acceptance and each model suffered from serious weakness. Hence, this research does not use any specific model but uses points obtained from all these models. For the purpose of the current study, the basic five dimensions of SERVQUAL scale have been retained. Apart from these five dimensions one more dimension namely convenience is added after careful investigation conducted among the experts in the field of airline operations in order to suit the Indian domestic airline context.

This scale comprised of six sub dimensions: 1) Reliability; 2) Responsiveness; 3) Assurance; 4) Empathy; 5) Tangibility and 6) Convenience. The exact procedure adopted in service quality scale development is extensively explained in the next analysis chapter. The definition of each of these dimensions is presented here.

**Tangibility** is defined as the physical evidence of service (e.g. physical facilities, appearance of personnel, or tools or equipments used to provide service);

**Reliability** involves consistency of performance and dependability (e.g. a firms consistency in providing the offerings to the passengers as it is promised)

**Responsiveness** concerns the willingness and readiness of employees to provide service (e.g. timeliness of service)

**Assurance** corresponds to the knowledge and courtesy of crew members of the airlines (e.g. ability to inspire trust and confidence of passengers)
Empathy pertains to caring, individualized attention that a firm provides to its passengers /customers (e.g. understanding passenger need and problem)

Convenience refers to the extent to which airline firms takes into account the convenience of its passengers (e.g. Easeness in booking and cancelling the tickets and availability of connection flights)

4.2. SERVICE SATISFACTION

Review of literature on customer /passenger loyalty suggests that one of the most important determinants of loyalty is service satisfaction. Hence service satisfaction is taken as the second endogeneous variable of the study and the relevance and importance of this variable is described in this section.

4.2.1. Definitions of Service Satisfaction

Satisfaction is perceived to be a post consumption evaluation or pleasurable level of consumption related fulfillment (Oliver,1996 p13).It is thus considered as an end state outcome.

It is the function of the expectation that the consumer brings to the service encounter. (Zeithaml ,Berry and Parasuaraman ,1996)

Customer satisfaction generally arises form individual companies of perceived product performance compared with expectations for this performance and satisfaction arises when expectations are exceeded. (Stafford et al., 1998).

Overall satisfaction is the consumers satisfaction with the organization based on all the encounters experience with the particular organization. (Bitner and Hubert, 1993, p77).

It is a function of the discrepancy between a consumers prior expectations and his or her perception after the purchase of service. (Churchill and Suprenant, 1982).
4.2.2. Service Satisfaction and Its Attributes

Implicit in the service marketing literature is the idea that the satisfaction of customers is related to service quality which influences their behavioural intentions as well as the organizational performance (Woodside et al., 1989). However the direction of the causal relationship between quality and satisfaction has been the subject of extensive debate. The view of Parasuraman et al (1988) that the satisfaction, over a time period leads to a general perception of service quality has been supported till the nineties (Bitner, 1990) subsequent research , however has reported that the perceived service quality is an antecedent to service satisfaction (Cronin and Taylor, 1992). Although some authors contend that the distinction between service quality and service satisfaction is unclear as customers do not perceive satisfaction and quality as different constructs , a few of the recent studies have succeeded in establishing the directionality of the causal relationship between the two constructs without clear description.

Satisfaction is perhaps the most investigated constructs in the history of marketing scholarship. In the last decade, service marketing scholars have begun to highlight the role of satisfaction in quality and loyalty linkage. In research on customer loyalty, the satisfaction has been considered as an important determinant. It is deemed as the paramount marketing outcome. However, the empirical evidence concerning the relationship between customer satisfaction and loyalty has remained vague. This is more so for the services where the delivery process is extensive like for example airline services ,the service experience judgement becomes highly subjective which in turn affects loyalty deliberations .(Ruyter and Blomer ,1999).

Deviating from the well set path, Ruyter and Blomer, 1999 attempted to include two moderating variables in assessing the relationship between service satisfaction and service loyalty. The result of the empirical study conducted in educational institute in Belgium, drawing a sample of 668 students; reveal that the impact of service satisfaction and service loyalty is strongly modulated by the value
attainment and positive mood. More specifically, the service satisfaction and service loyalty association is strongest when passengers perceive that the combination does not help them in the attainment of instrumental values and when low positive mood and value attainment indeed play an additional role in loyalty determination.

Lassar, Manolis and Winsor (2000) had tested the ability of service quality to predict the service satisfaction by deploying two distinct and well known models of Prasuraman and Gromroos. It was clearly established through regression analysis that the technical /functional quality constructs as well as SERVQUAL constructs were the antecedents of service satisfaction. In order to strengthen their findings , they introduced two moderator variables, viz communication and service failure and still found the significant and positive impact of service quality and service satisfaction model. Thus Lassar et al. (2000) summed up that, of the two measures of service quality, Groonroos model was better suited for predicting customer satisfaction.

Dabholkar and Overby (2003), in their attempt to determine the meaningful and actionable links between the constructs service quality and service satisfaction, examined whether service process and service outcomes are differently related to service quality and service satisfaction evaluations, in line with the earlier studies undertaken by Brady and Cronin(2001). Though the earlier studies failed to give clear answer as to the exact directional relationship between the service quality and service satisfaction evaluations, this empirical study conducted by Dabholkar and Overby on the sample group of home sellers from different zones, by using the statement “I think the quality of the service is excellent /poor, therefore I am satisfied /dissatisfied” they have tied over service quality to process factors and service satisfaction to outcome factors, thus delineating these two construct lucidly and underlining the unidirectional relationship between service quality and service satisfaction.

Both service quality and passenger satisfaction have certain things in common, satisfaction is generally viewed as a broader concept than service quality assessment. Zeithaml and Bitner (1996) attempt to understand customer satisfaction
formation has yielded several important insights such as disconfirmation and perceived quality were found to affect customer satisfaction more than expectations and expectancy disconfirmation. Consequently, customer satisfaction programs like frequent flyer programs were touted as important tools that can increase profits by preventing customers from changing the choice.

Jehn-Yih Wong, Pi-Heng Chung (2010) developed a case on Retaining passenger loyalty through data mining: a case study of Taiwanese airlines.: An article from: Transportation Journal This study develops a loyal passenger mining process that is used to assess passenger loyalty and extract their information by a data mining technique from a database. Analytical results demonstrate that loyal passengers had high satisfaction in terms of service preferences, including airport service, passenger cabin facilities, information provision and complaint resolution, and flights departing on schedule. Loyal passengers also emphasized luggage services and obtaining airline information without an agency. The suggestions of this study not only provide Taiwanese airlines with a valuable reference for planning database marketing and managing loyal passengers but also expand the applicability of management information systems (MIS) to airline industry research.

4.2.3. Service Satisfaction as an Antecedent to Service Loyalty

Oliver et al. (1992) proposed that the relationship between satisfaction and loyalty is non-linear resulting from the tendency to remain loyal despite the pressure of switching incentives.

Shemwell et al. (1998) through testing the triangulation model between service quality, service satisfaction and service loyalty have empirically established the relationship between satisfaction and complaining behavior and pronounced that commitment is a key indicator of loyalty and when satisfaction level is high the customers predisposition to switch is low and thereby strengthening the loyalty.

Many studies on customer satisfaction have concluded that there is a significant relationship between customer satisfaction and loyalty. But their findings have been questioned since most of these studies focus on measuring the cognitive
component of customer satisfaction. But the study conducted by Yu and Dean (2001), included affective component as well and explored the role of emotions, both negative and positive and found out that the emotional satisfaction is positively correlated with loyalty. The result of their empirical study among students of an Australian University affirmed that the emotions are best predictors of loyalty and this overall measure proved to be better predictor of repurchase intentions or loyalty.

Fullerton and Taylor (2002) argued that, service satisfaction is a strong mediator of the effects of service quality on service loyalty. This study also found a strong support for the existence of a non-linear relationship between service satisfaction and service loyalty intentions. The nature of the non-linear relationship is such that the effect of satisfaction on the loyalty related intentions are more positive at higher levels of satisfaction than it is at lower levels of satisfaction. It has also been demonstrated that there is a non-linear relationship between service satisfaction and behavioural intentions. Immensely satisfied customers are more likely to remain loyal than the customers who are more satisfied.

Studies have also found that satisfaction is a consequence of service quality evaluation, without investigating to which extent it mediates the relationship between service quality and behavioural intentions. Satisfied customers are found to provide word of mouth to individuals who have no relation to a specific transaction influencing thus their purchase intentions which is nothing but a strong form of loyalty namely cognitive loyalty.

Homburg et al. (2005) revealed that the strong, positive impact of customer satisfaction on willingness to pay more which is a strong indicator of loyalty and they provided support for a non-linear and functional relationship between service satisfaction and service loyalty. They provided evidence for stronger impact of cumulative satisfaction rather than transaction specific satisfaction on willingness to pay.
4.2.4. Service Satisfaction Scale

The theory and practice of customer satisfaction measurement have made tremendous advancement during the past four decades, debate continues concerning the best way to conceptualise and measure customer satisfaction. The empirical investigation of both transaction specific satisfactions and overall satisfactions is one issue that has received relatively little attention in the literature (Anderson and Fornell, 1994). It is important that academic researches as well as practitioners understand the distinction between transaction specific and overall satisfaction and their relative influence on repurchase intentions. Furthermore, the relationships among the overall satisfaction, transaction specific satisfaction and repurchase intentions are not clear (e.g. Parasuraman et al., 1994). The scales /measures that have been developed to capture service satisfaction thus far have followed two specific approaches; first one considering satisfaction as transaction specific and second one as cumulative. Concise review of such approaches and the researchers mixture are presented below.

Lassar, Manolis and Winsor (2000) have measured customer satisfaction with a ten item index and development of the index was justified by stating that it would eliminate the response bias and include all randomly chosen customers. The customers were asked to indicate their level of satisfaction on three functional and six technical characteristics of satisfaction.

Dabholkar and Overby (2003) have measured service satisfaction with a global measure. They argued that customers were able to disassociate service satisfaction and service quality only at global level and by doing so, they found out the customers were able to discern between service quality and service satisfaction and related service quality to process features and service satisfaction to outcome factors.

Transaction specific satisfaction refers to the consumers dis/satisfaction with a discrete service encounter, whereas overall satisfaction refers to the consumers overall dis/satisfaction with the organization based on all encounters and experiences.
with that particular organization (Bitner and Hubert, 1994). Consumers are likely to comment on particular events of a service transaction (e.g. specific employee actions) when asked about overall satisfaction, consumers are likely to comment on global impressions and general experiences with the firm (e.g. reliability of the airline operator).

Since overall satisfaction is based on information from all previous experiences with the airline service provider, overall satisfaction can be viewed as a function of all previous transaction specific satisfactions (Parasuraman et al., 1994). Overall satisfaction may be based on many transactions or few depending on the number of times the consumer has used a particular provider. In essence, overall satisfaction is an aggregation of all previous transaction specific evaluations and is updated after each specific transaction much like expectations of overall service quality are updated after each transaction (Boulding et al., 1993). It should be noted that although overall satisfaction at time t-1 will have an impact on the expectations which produce transaction specific satisfaction at time t, this transaction specific satisfaction will only be influenced indirectly by overall satisfaction and not completely reflect or subsume the overall satisfaction construct. Overall satisfaction at time t will be based on overall satisfaction at time t-1 (which reflects all previous transaction specific satisfactions), as well as the transaction specific satisfaction may not be perfectly correlated with overall satisfaction since service quality is likely to vary from experience to experience, causing varying levels of transaction specific satisfaction. Overall satisfaction on the other hand can be viewed as a moving average that is relatively stable and more similar to an overall attitude (Parasuraman et al., 1994). For example, consumer may have a dissatisfying experience because of lost baggage on a single airline flight (i.e. low transaction specific satisfaction) and yet still be satisfied with the airline (i.e. overall satisfaction due to multiple previous satisfactory encounters).

The relationship among overall satisfaction, transaction specific satisfaction, and repurchase intentions are another critical issue that has received little empirical attention. Three competing models depicting possible relationships among these
important variables are Figure 4.1. Common to all three models is the relationship between transaction specific satisfaction and overall satisfaction. Since overall satisfaction is a global evaluation based on all previous service encounters, it is believed that the satisfaction with the last transaction and all others before that will have a direct influence on the overall evaluation (Parasuraman et al., 1994). In terms of transaction specific satisfaction, only the satisfaction with the last transaction would be considered for the expression of satisfaction state, which is expected to severely impose upon the outcome. Owing to this finding, the scale adopted for measuring satisfaction in the present study is a single item, global scale, intended for capturing overall satisfaction level of customers.

4.3 SERVICE LOYALTY

Despite the extant literature on passenger loyalty, it is recognized that the psychological processes behind passenger loyalty are still not understood. In today’s highly competitive environment, airline companies should protect the long term interest of the passengers and hence should seek the ways through which the passenger loyalty toward the airline companies could be obtained. Marketers opine that these long term relationships with the passengers would enhance their profitability (Dick and Basu, 1994; Garbarino and Johnson, 1999; Grossman, 1998), increased sales, lower costs and other tangible benefits (Terrill et al., 2000). The time has come for the airline companies to consider this passenger loyalty as a source of competitive advantage. It has been established that the passengers will not be impressed only by the core product attributes as other firms are also providing similar offerings. The study of passenger loyalty and business performance has been a focus in the passenger relationship management. While the study on brand loyalty has been the topic of research in the past, numerous research articles appearing in journals betoken the development and conceptualization of the service loyalty models. Many airline companies have introduced innovative services and it is less expensive to retain a passenger than acquiring a new one. The longer the passenger travel with an airline company for all his or her travel needs, the more positive
outcome he or she generates which includes the frequency of travel, passengers' better understanding of airline organization and more positive word of mouth which in turn would generate new passengers for the airline.

4.3.1 Attributes of Service Loyalty

Service loyalty is conceptualized as an interaction of attitude and behavior (Dick and Basu, 1994) such that the behavior (loyalty) is determined by the strength of relationship between relative attitude and repeat patronage. Extending this, the loyalty dimensions or concepts are to include behavioural, attitudinal and cognitive processes. The attitudinal dimensions of loyalty should include attributes such as word of mouth, complaining behavior and purchase intentions. The behavioural loyalty measures include attributes such as brand allegiance, price elasticity, share of category (number of times a brand is purchased in a given period). The cognitive loyalty component includes attributes like preference to the service organization, the belief that the service organization provides best offer and suiting customer needs. But it should be mentioned that the loyalty dimension must also include factors such as commitment and trust attributes, even though the utility of these constructs by Luarn and Lin (2003) was meant to consider them as antecedents to loyalty rather than component of loyalty. Based on the review of the aforesaid earlier studies, the researcher identified passenger loyalty in terms of word of mouth, price sensitivity and complaining behavior in the context of domestic airline sector. Using service loyalty as endogenous variable, an investigation is made to find out its relationship with the exogenous variables viz. service quality and service satisfaction.

Several contributions have been made in service marketing literature in measuring the service loyalty (SERVLOYAL). Significantly, factors such as service quality (Caruana, 2002), service satisfaction (Luarn and Lin, 2003), Image (Mazursky and Jacoby, 1986), Values (Andreasseean and Lindestad, 1998) commitment (Dwyer et al., 1992) and trust (Luarn and Lin, 2003) are identified to have an impact on SERVLOYAL. Since service is peculiar that involves personal
encounter and also has a bit of perceived risk in the consumption of the same (Crossby et.al., 1990). The term loyalty has been defined as a degree of continuity in patronage (Meidan, 1996), customers disposition in terms of preferences and intentions (Bloemer and Casper, 1995), and a psychological process resulting in brand commitment (Bloemer et al., 1998). Further, different measures of service loyalty which have been utilized in different industries was also used by the researcher to develop an all encompassing measurement of SERVLOYAL model for Indian domestic airline sector.

4.4. FRAMEWORK OF RESEARCH MODEL

The concepts and findings of different studies reviewed so far substantiate the fact that there is a consensus among the researchers that service quality and service satisfaction have a strong influence on service loyalty. It is therefore considered appropriate to explain the causal relationship between the variables service quality, service satisfaction and service loyalty in the context of Indian domestic airline sector.

4.4.1. CAUSAL ORDER FRAMEWORK

Scanning the literature establishes the linkages among the aforementioned constructs. As discussed earlier service quality evaluations are mostly cognitive whereas passenger satisfaction has been viewed as global assessment that follows evaluations of service quality over time. Several researchers have found empirical support for service satisfaction as a consequence of service quality. But in situations involving extremely positive or negative experiences, passengers will have a feeling of strong satisfaction or dissatisfaction with the service. These emotional reactions will override existing cognitive assessments and will determine subsequent cognitive evaluations, which in turn affect the loyalty intentions. On the other hand in non extreme situations, where the services within an acceptable range, passengers will evaluate the service more rationally and later form an overall, global evaluations based on those cognitions. As a result, service quality evaluations will
precede and influence service satisfaction. In other words though service quality and service satisfaction are different constructs, consistent findings suggest that service quality is an antecedent to customer / passenger satisfaction. The research interest moved further into investigation of the complex relationship of these two constructs with service loyalty. Thus in order to assess the casual order of service quality, service satisfaction and service loyalty framework, this investigation is undertaken so as to ascertain

Unambiguously the several key aspects that would determine the airline service quality, airline service satisfaction and airline service loyalty relationship.

![Diagram of relationship framework among airline service quality, airline service satisfaction and airline service loyalty]

**Figure 4.1 Relationship framework among Airline service quality, Airline Service satisfaction and Airline service loyalty**

As depicted in Figure 4.1, the present study is to analyse the impact of service quality on service loyalty directly (H5) and also the impact of service quality on service loyalty indirectly (H3) through service satisfactions mediating role (H6)