CHAPTER 3

LITERATURE REVIEW

3.1 PREVIEW OF LITERATURE REVIEW CHAPTER

In the first chapter namely Introduction to research work, a preliminary logic of need for study of the Indian cellular mobile services sector (namely its strategic importance and problem areas this sector faces) as also the aims and objectives, hypotheses, justification, gaps and limitations and significance of study was established and the second chapter on Overview looked at the Indian cellular mobile service sector in detail.

This third chapter of Literature review initially outlines the logic of the concepts that this researcher has decided to choose for detailed study, the sources used to conduct the secondary data search as also the thought process behind the type of research papers that have been selected.

The literature review then logically proceeds to review the past literature in detail, on each of the concepts chosen for study- namely desired service expectations, perceived service quality, and behavioral intentions (the consumer behavior outcome). In the course of the study, switching costs, has also been included for the study. Further, popular measurement tools/scales and the debate on the better tool/scale has also been presented.

The literature review further presents in detail, all research papers in the area of service quality of cellular mobile services, both in India and abroad.

Emanating from the literature review, is the theoretical framework and model which presents the interrelationships between the variables under study. This helped the researcher to establish the gaps and limitations of all researches in the area of cellular mobile services to date, which then further led to establishing the objectives and hypotheses for this research work.
(which have already been mentioned in first chapter on introduction to research work and hence have not been repeated here).

3.2 BACKGROUND OF LITERATURE REVIEW

The title of the thesis defined the area of study around which a comprehensive literature review was conducted. The literature review thus involved understanding concepts, such as “Service Quality” (namely Desired Service Expectations, Perceived Service Quality), and “Behavioral Intentions” (the consumer behavior outcome) as also the interrelationships between these concepts. In the course of study, the researcher came across another concept “Switching Costs” and the same has been also presented in the study.

Also some research papers were collected for review to understand the popular and standardized measurement scales if any that could be employed by this researcher.

Besides research papers collected for understanding the various concepts and interrelationships (which included other industries as well) this researcher’s main focus was Cellular Mobile Service sector, and hence studied research papers in the area of Service Quality, and Behavioral Intentions with specific reference to Cellular Mobile Services—both abroad and in India.

The general papers from the other industries were selected based on their relevance to the thesis topic, in addition to the theoretical knowledge, new perspectives and above all, popularity (as indicated by the times the research paper was cited by others, in their research papers).

All the service quality papers in Cellular Mobile Services were selected, without exception, for literature review. While reading the research articles, this researcher noted the sample size, data collection methods and data analytic techniques used, besides the important findings of the research papers.
3.3 DATABASE USED FOR LITERATURE REVIEW:

The literature review was conducted using **online library databases like “EBSCO” and “Emerald”** which have a comprehensive list of articles from refereed journals in the form of abstracts and full texts.

The literature review was conducted initially in July 2005 and then from December 2009 to February 2010 (and updated at regular intervals till December 2013). The literature review initially led this researcher to a shortlist of 1873 papers. After going through the abstracts of all 1873 papers, **108 papers were studied in detail.** This helped in a comprehensive understanding of variables – dependent, independent, and also the interrelationships. This researcher came across **38 papers on cellular mobile services of which 8 papers were in the Indian context** (till primary research survey began in August 2010). By December 2013, another 15 research papers in cellular mobile services have been added.

Besides the online library databases, the internet was extensively used to Google search for any data or research in the area of service quality for cellular mobile services.

3.4 EXPLORING THE PAST LITERATURE

The following sections are a result of this detailed review of past literature

3.4.1 STUDIES ON SERVICE QUALITY

One of the greatest challenges facing organizations today is the ever-growing competition, the continuous increase in customer expectations (Joseph and Walker, 1988; Leonard and Sasser, 1982; Takeuchi and Quelch, 1983) and customers’ ever increasing demands as service improves (Ettorre, 1994). Customers are also becoming increasingly critical of the quality of service they experience (Albrecht and Zemke, 1985). Customer satisfaction as a focus is no
longer enough for success; it has been replaced by customer delight (Brown et al., 1992). There is a need to offer superior service (Parasuraman, 1995) and to exceed customer expectations (Berry and Parasuraman, 1991; Klose, 1993; Wren, 1988), to delight the customer, as opposed to merely satisfying his/her needs (Brown et al., 1992; Timmers and Van der Wiele, 1990).

3.4.1.1 STRATEGIC IMPORTANCE OF SERVICE QUALITY TO ORGANISATIONS

Service business success has been associated with the ability to deliver superior service (Gale, 1990; Rudie and Wansley, 1984) by maintaining high quality (Parasuraman et al., 1988). Delivering superior quality of service has been recognized as the most effective means of ensuring that a company’s offerings stand out from a crowd of look-alike competitive offerings (Parasuraman et al., 1991). Yoo and Park (2007) state that the firm's ability to create and sustain competitive advantage depends upon the high level of service quality provided by the service provider. Delivering quality service is also an essential ingredient for establishing and maintaining a loyal and profitable customer base (Bloemer et al., 1999; Rust et al., 1995; Zeithaml et al., 1996; Zeithaml, 2000) and stock performance (Aaker and Jacobson, 1994).

Berry et al. (1988), stated service quality has become a great differentiator and the most powerful competitive weapon, which many leading service firms possess. Studies using the PIMS (Profit Impact of Market Strategy) data have uncovered that companies offering superior service achieve higher-than-normal market share growth (Buzzell and Gale, 1987), increased market share, premium prices and hence increased profitability (Phillips, Chang and Buzzell, 1983), realizing an 8% higher price than their competitors (Gale, 1992) and sustain a competitive advantage in their served markets (Hampton, 1993). Lovelock’s (1996) research reveals that delivering high quality service is closely linked to profits, cost savings, and market share in many industries.
Today, many services organizations have responded to the financial impact of quality, treating it as a strategic weapon (Paradise-Tornow, 1991)

However a major challenge for companies is how to deliver service quality consistently. (Zeithaml and Bitner, 2000)

3.4.1.2 PRODUCT QUALITY DEFINITION

Early efforts in defining quality were mostly centered on tangible products, while the seemingly more difficult services sector was ignored. Product quality was linked to the technical specifications of goods (Gronroos, 1990); conformance to standards (Crosby, 1979); eliminating “internal failures” (defects before the product leaves the factory) and “external failures” (defects after product use) (Garvin, 1983). However, it was realized that product quality is insufficient to understand service quality (Parasuraman et al., 1985).

Service quality was recognized as different from product quality because of nature of services.

3.4.1.3 NATURE OF SERVICES

Differences in evaluation of quality for goods and services is based on two category classification of properties proposed by Nelson (1974)-search properties, experience properties and Darby and Karni (1973) who added a third category, credence properties.

Most services are low on search properties (can evaluate quality prior to purchase) and are high in experience (can evaluate only after experience) and credence properties (difficult to evaluate even after experience) making their quality more difficult to evaluate than quality of goods (Zeithaml, 1981).

Services industries can also be classified into people-based (e.g., window washing, accounting services) and facility/equipment – based industries (e.g. automated car washes, vending machines) (Kotler, 1994).
Booms and Bitner (1981) suggested including three additional factors such as people, physical evidence, and process as marketing mix variables for services.

3.4.1.4 NATURE OF SERVICE, MAKING DEFINING AND ASSESSING SERVICE QUALITY DIFFICULT

Services have unique characteristics that physical products do not have, such as intangibility, inseparability, variability and perishability (Kotler, 1994; Rust et al., 1996). Most services are intangible (Bateson, 1977; Berry, 1980; Lovelock, 1981; Shostack, 1977). Because of intangibility, customer evaluative criteria are less well articulated, and the appraisal of the value received is much more subjective (Berry, 1980; Keaveney, 1995; Lovelock, 1991; Zeithaml et al., 1996). Intangibility means that a consumer's perception of quality is often based on tangible evidence and price rather than the core service (Zeithaml, 1981). Price becomes a major quality indicator in situations where other information is not available (McConnell, 1968; Olander, 1970; Zeithaml, 1981). Intangibility of services may also complicate the formation of expectations (Parasuraman et al., 1988).

Carman and Langeard (1980), Gronroos (1978, 1983) and Lehtinen and Lehtinen (1982) have pointed out another characteristic of services - its simultaneous production and consumption. In most services, as quality occurs during service delivery, usually in an interaction between the customer and contact personnel of the service firm (Zeithaml et al., 1988; Lehtinen and Lehtinen, 1982), consistency of behavior from service personnel and hence uniform quality, is difficult to assure (Booms and Bitner, 1981).

Booms and Bitner (1981) and Zeithaml (1981) have stated that, especially in those services with high labor content, service performance will vary from producer to producer, and also from one encounter to the next, hindering the consistency of service delivery and thus, assessment of service quality.
Consumers experience pre-purchase uncertainty from purchase and use of a product (Bauer, 1960; Cox, 1967). Because the amount and quality of information available is diminished in the case of an intangible service, the amount of perceived risk is expected to be higher in services than with products (Guseman, 1981; Levitt, 1981; Murray and Schlacter, 1990).

3.4.1.5 PERCEIVED SERVICE QUALITY

Researchers (Garvin, 1983; Dodds and Monroe, 1984; Holbrook and Corfman, 1985; Jacoby and Olson, 1985; Zeithaml, 1987) have emphasized the difference between objective and perceived quality.

**Perceived service quality** is defined by Parasuraman et al. (1988), as **“a global judgment, or attitude, in relation to the superiority of the service”**, and many researchers in the service quality literature have supported this definition (Boulding et al., 1993; Bolton and Drew, 1991; Cronin and Taylor, 1992). Service quality has been described as a form of attitude, related but not equivalent to satisfaction that results from the comparison of expectations with performance (Bolton and Drew, 1991; Parasuraman, Zeithaml, and Berry, 1988).

Customers assess service quality by comparing what they feel a seller should offer against the seller’s actual service performance (Grönroos, 1982; Lehtinen and Lehtinen, 1982). **Service quality is a measure of how well the service level delivered matches customer expectations.** (Lewis and Booms, 1983; Gronroos, 1982). Bitner, Booms and Mohr (1994) define service quality as “the consumer’s overall impression of the relative inferiority/superiority of the organization and its services”.

37
3.4.1.6 SERVICE QUALITY AND ITS EFFECTS

The solid line between service quality and overall customer satisfaction (Cronin and Taylor, 1992; Spreng and Mackoy, 1996), between service quality and value (Bolton and Drew, 1991; Fornell et al., 1996), between service quality and behavioral intentions (Boulding et al., 1993; Zeithaml, Berry and Parasuraman, 1996), between value and behavioral intentions (Bolton and Drew, 1991; Grewal, Monroe, and Krishnan, 1998), between customer value and overall customer satisfaction (Patterson and Spreng, 1997; Woodruff, 1997), and between overall customer satisfaction and behavioral intentions (Anderson and Sullivan, 1993; Swan and Oliver, 1991) represent established links in the service literature.

3.4.1.7 ARE CUSTOMER SATISFACTION AND SERVICE QUALITY SEPARATE CONSTRUCTS?

Several researchers have raised the issue of whether service quality and customer satisfaction are the same or different constructs (Dabholkar, 1993, 1995; Iacobucci, Grayson and Ostrom, 1994; Oliver, 1993). In fact, researchers have not always been able to separate the two constructs empirically. In a study of retail customers, Dabholkar (1995) found the two constructs to be distinct for recent customers, but to overlap in meaning for long-term customers, as customer satisfaction evaluations grew increasingly cognitive over time. Bansal and Taylor (1997) found a very high correlation (0.96) between the two constructs for another study of banking customers, but reported that a Chi-square difference test found discriminant validity. Spreng and Singh (1993) studied evaluations of service by banking customers, but failed to find discriminant validity between service quality and customer satisfaction. Others have been able to separate service quality and customer satisfaction more easily, but possibly because one construct was defined at a transactional level and the other at a global level.
3.4.1.8 SERVICE QUALITY AND BEHAVIORAL INTENTIONS

Many studies have found a direct positive link between service quality perceptions and customer behavioral intentions (Boulding et al., 1993; Zeithaml et al., 1996; Ranaweera and Neely, 2003). Boulding et al. (1993) in their longitudinal study found that the service quality perceptions of customers positively affect their intended behaviors. Bitner (1990), Bolton and Drew (1991), Bolton (1998), Woodside et al. (1989), Cronin and Taylor (1994), Choi et al. (2004), Zeithaml et al. (1996), and Cronin et al. (2000) also support the direct linkage between service quality and repurchase intentions of customers.

Zeithaml, Berry, and Parasuraman (1996) identified five dimensions of behavioral intentions: word of mouth, propensity to switch, willingness to pay more, external response to problem, and internal response to problem. Studying the relative importance of service quality on the five behavioral intention dimensions, they found positive effects with word of mouth, and willingness to pay more, negative effects with propensity to switch and external response to problem, and no significant effects with internal response to problem. The findings of Parasuraman et al. (1988, 1991), Reichheld and Sasser (1990), and Boulding et al. (1993) indicate that when consumers’ perceptions of service quality are high, consumers are willing to recommend the company to others. (Richins, 1993; Singh, 1988) have indicated that when consumers perceive to have experienced inferior service performance, they are likely to engage in a complaining behavior to third parties (i.e., exhibiting negative word-of-mouth communications).
3.4.1.9 SERVICE QUALITY CONCEPTUALIZATION-EUROPEAN /NORDIC VERSUS AMERICAN PERSPECTIVE

Researchers generally have adopted one of the two conceptualizations of service quality. The first is the European/Nordic perspective (Gronroos, 1982, 1984), which defines the dimensions of service quality in global terms as consisting of technical and functional quality.

1) Technical quality-the service outcome or the end result of the service. Technical quality refers to how well the core service meets the customers’ expectations.

2) Functional quality-the service delivery process or the way the service is performed. Functional quality refers to the impact of the interaction process or how the service production and delivery process itself is perceived. Functional quality is embedded in the service encounter; it largely depends on the interaction between service provider and the customer (Walker, 1995).

The quality dimensions suggested by Gronroos (1982, 1984) have been regarded as the main dimensions of perceived service quality in numerous different contexts and are assumed to be generically applicable to services (Holmlund, 2001).

The second, the “American” perspective (Parasuraman, Zeithaml and Berry, 1988), uses terms that describe service encounter characteristics (i.e., reliability, responsiveness, empathy assurance and tangibles). Although the latter conceptualization dominates the literature, a consensus has not evolved as to which, if either, is the more appropriate approach.

Reliability dimension of the US School of thought on service quality, corresponds most closely to the technical quality or outcome quality within the European school of thought. If customers cannot judge the outcome quality of the service, they will likely base their judgment on process dimensions (Zeithaml and Bitner, 1996).
3.4.1.10 SERVICE QUALITY DIMENSIONS- DEBATE

There has been considerable debate as to the basic dimensions of service quality (Brown et al., 1993; Cronin and Taylor, 1992) and the dimensions that may be common versus distinct across services (Carman, 1990; Cronin and Taylor, 1992; Teas, 1993; Taylor and Baker, 1994).

There is no general agreement as to the nature or content of the dimensions. Two (e.g., Gronroos, 1982; Lehtinen and Lehtinen, 1982; Mels, Boshoff and Nel, 1997), three (e.g., Rust and Oliver, 1994), five (e.g., Parasuraman, Zeithaml and Berry, 1988), and even ten (e.g., Parasuraman, Zeithaml and Berry, 1985) dimensions have been proposed.

3.4.1.11 SERVICE QUALITY DIMENSIONS –DIFFERENT MODELS

Lehtinen and Lehtinen (1982) postulated three quality dimensions: physical quality, which includes the physical aspects of the service (i.e. physical product, equipment and environment); corporate quality, (which involves the company’s image or profile) and interactive quality, (which derives from the interaction between contact personnel and customers as well as between customers). Compared to both physical quality and interactive quality, corporate quality is usually more stable in nature.

Lehtinen and Lehtinen’s (1982) study showed that depending on type of service, different dimensions of service quality—physical quality, interactive quality, and corporate quality are important and that the described dimensions are not completely independent of one another. E.g. the physical elements have a great effect on corporate quality and also provide a basis for interactive service quality.

Rust and Oliver (1994) offer a three-component model; the service product (i.e., technical quality, see Gronroos 1982, 1984), the service delivery (e.g., functional quality, see Gronroos, 1982, 1984) and the service environment (see Bitner, 1992). McDougall and Levesque (1994) and McAlexander, Kaidenberg, and
Koenig (1994) empirically validated the existence of Rust and Oliver's three-component concept in retail banking and health care, respectively.

Dabholkar, Thorpe and Rentz (1996) identified and tested a hierarchical conceptualization of retail service quality that proposes three levels: (1) customers’ overall perceptions of service quality, (2) primary dimensions, and (3) sub dimensions.

Brady & Cronin (2001) presented a model that provides the first empirical evidence for Rust and Oliver’s (1994) three-component hierarchical conceptualization of service quality.

Based on their study from four service industries: fast-food, photograph developing, amusement parks, and dry cleaning, Brady and Cronin (2001) suggested that each of the primary dimensions of service quality (interaction, physical environment, and outcome) has three sub dimensions. Interaction quality has attitude, behavior and expertise as sub dimensions, while physical environmental quality has ambient conditions, design and social factors while outcome quality has waiting time, tangibles and valence. These sub dimensions provide the necessary foundation for answering the question of what needs to be reliable, responsive and empathetic. Thus the authors argued that while reliability, responsiveness, and empathy of service providers are important to the provision of superior service quality, as is suggested by the American school (Parasuraman, Zeithaml and Berry, 1985, 1988) these factors are modifiers of the subdimensions, as opposed to direct determinants. The implication is that they represent how each sub dimension is evaluated (reliable or not, responsive or not, and so on),

3.4.1.12 SERVICE QUALITY CONSTRUCT STILL UNRESOLVED

The service quality construct is still considered by many as unresolved (Caruana, Ewing and Ramaseshan, 2000), and far from conclusive (Athanassopoulos, 2000; Parasuraman, Zeithaml and Berry, 1994).
3.4.1.13 TECHNICAL OUTCOME QUALITY- IMPORTANCE OF CORE SERVICE IN SERVICE QUALITY EVALUATIONS

There is consensus in the literature that the technical quality of a service encounter significantly affects customer perceptions of service quality (e.g., Carman 2000; Gronroos 1982, 1984, 1990; Rust and Oliver 1994). Czepiel, Solomon and Surprenant (1985) refer to the technical outcome as the “actual” service and posit that it is a determinant in assessing the quality of a service encounter. Rust and Oliver (1994) refer to the service outcome as the “service product” and suggest that it is the relevant feature customers evaluate after service delivery. Marketing scholars have yet to identify attributes that define technical outcome quality. Gronroos (1984) and Rust and Oliver (1994) simply state that this is what the customer is left with when service is rendered.

When customers are unable to judge technical quality, customers use any tangible evidence of the service outcome as a proxy for judging performance (Booms and Bitner, 1981; Hurley and Estelami, 1988; Shostack, 1977; Zeithaml, Parasuraman and Berry, 1985). Brady & Cronin’s (2001) survey indicated that waiting time influences outcome quality perceptions. Parasuraman, Zeithaml and Berry (1985) find that customers identify service punctuality as an integral part of their overall evaluation.

Schneider and Brown (1995) clarified that many a time, managers become so involved with processes and contexts for service that they tend to overlook “core service.” They also argued that fancy facilities, modern equipment, stylish uniforms and terrific signs can never countervail bad or mediocre performance on core dimensions i.e. the technical quality.
3.4.1.14 FUNCTIONAL QUALITY-IMPORTANCE OF HUMAN ELEMENT IN SERVICE QUALITY EVALUATION

Services management literature has repeatedly emphasized the importance of the human element in the delivery of superior service (Crosby and Stephens, 1987; Gronroos, 1990; Parasuraman et al., 1985; Solomon et al., 1985).

In many service situations, the service personnel’s interaction with the customer has been recognized as a critical determinant of satisfaction (Surprenant and Soloman, 1987; Bitner, 1992). Customers’ perception of exceptional service (Kandampully, 1993) depends on the perceptions of service delivery by service personnel, and in many cases, this person essentially epitomizes or defines the service to the customer (Booms and Nyquist, 1981; Lewis and Entwistle, 1990; Parasuraman et al., 1991).

Services are commonly offerings designed to assist, serve or fulfill customers’ personal needs, and the customer seeks to establish and maintain a relationship with the service provider (Parasuraman et al., 1991). Customer satisfaction and subsequent desire to develop a relationship emanates from the emotional connection to the service provider (Stauss, 1996). This emotional bond leads the customer to buy repeatedly or exclusively from that service provider (Butz and Goodstein, 1996).

Since customers cannot `try out’ services; before purchase, they are forced to trust the firm to deliver the perceived service promise (Berry and Parasuraman, 1992). The human interaction evident during the service delivery process commonly reinforces the customer trust (Evans and Crosby, 1988), and effectively strengthens the relationship (McKenna, 1991).

Gummesson (1987) identifies two dimensions of relational quality in the service interface. He defines them as professional relations and social relations. The professional relationship is grounded on the service provider’s demonstration of competence; the social relationship is based on the efficacy of the service provider’s social interaction with the customer.
3.4.1.15 IMPORTANCE OF TANGIBLES IN SERVICE QUALITY PERCEPTIONS

Because services are intangible and usually cannot be tried prior to purchase, customers look for tangible evidence of what they are about to experience in a given service encounter (Langeard et al., 1981; Shostack, 1977). Physical evidence such as environmental design, décor, signage, and business cards/stationery, send messages that help to establish the firm’s image and influence the customer’s expectations (Baker, 1987; Booms and Bitner, 1982; Shostack, 1977).

The physical environment, is what Bitner (1992) names the ‘servicescape’. In Brady and Cronin’s (2001) study, three factors were named as influencing the physical environment quality: ambient conditions, facility design, and social factors. Ambient conditions pertain to non-visual aspects, such as temperature, scent, and music (Bitner, 1992). Facility design refers to the layout or architecture of the environment and can be either functional (i.e. practical) or aesthetic (i.e., visually pleasing). Social conditions, refers to the number and type of people evident in the service setting as well as their behaviors (Aubert-Gamet and Cova, 1999; Grove and Fisk, 1997).

Shamdasani and Balakrishman (2000) revealed that the physical environment is an important determinant for satisfaction in personalized service encounters.

Variations in physical environment can affect perceptions of an experience independently of the actual outcome (Biggers and Pryor, 1982; Maslow and Mintz, 1956).

The effect of tangibles on service quality evaluations has been an area of debate. Parasuraman, Zeithaml and Berry (1991) reported that the tangible service environment had no effect on customers' overall quality perceptions of telephone company, insurance companies, but had importance in banks. Similarly, Cronin and Taylor (1992) found that the tangible aspects of the service environment had no effect on customers' quality perceptions of pest control and
dry-cleaning services, and had only limited influence on quality perceptions for banks and fast-food restaurants. Dabholkar, Thorpe and Rentz (1996), on the other hand, found that the tangible aspects of department stores do influence customers' service quality perceptions, although to a lesser degree than do the intangible service factors.

Although the physical environment is apt to influence consumer attitudes about the service provider in all service settings (Bitner, 1992), the extent of its influence on consumers' affective responses may be especially pronounced if the service is consumed primarily for hedonic reasons (Wakefield and Blodgett, 1994) or if the consumer spends extended periods of time observing or experiencing the service environment (Baker, 1986). Hedonic consumption seeks pleasure or emotional fulfillment, as opposed to functional usefulness, from the service experience (Babin, Darden and Griffin, 1994). Wakefield and Blodgett (1999) studied three leisure settings wherein consumers are likely to spend a moderate amount of time (i.e., about 2 hours) in the physical environment: professional hockey games, a large family recreation center, and movie theaters. They found that tangibles created a level of excitement which in turn affected repatronage intentions and willingness to recommend.

Also, while service-quality perceptions related to reliability, assurance, responsiveness, and empathy have been shown to produce cognitive evaluations of perceived quality, research in environmental psychology has shown that properly designed physical environments may produce feelings of excitement, pleasure, or relaxation, i.e. affective responses (Russell and Pratt, 1980).

Hui and Bateson (1991) found that crowded physical environments lead customers to feel displeased and, subsequently, to desire to exit the place. Donovan and Rossiter (1982) found that pleasure and arousal derived from retail settings, increased customers' purchase intentions. Sherman and Smith (1987) also found significant correlations between purchase behavior and feelings of pleasure and arousal associated with store settings.
3.4.1.16 RELATIVE IMPORTANCE OF TECHNICAL OUTCOME, INTERACTION QUALITY AND PHYSICAL ENVIRONMENT - VARIES ACROSS SERVICES

Depending on the service, some quality dimensions are more or less important to overall service quality perceptions and customer satisfaction and some dimensions might not be important at all. Assurance is most likely important for high-risk services and for services high in credence properties (e.g. medical, legal services) (Zeithaml and Bitner, 1996). Lee, Lee and Yoo (2000) found that tangibles is a more important factor in the facility/equipment –based industries and responsiveness is a more important factor in the people-based industries. A striking result of the testing of the instrument by the authors (Parasuraman et al, 1988) in terms of the relative importance of the five dimensions in predicting overall quality was that reliability was consistently the most critical dimension. Empathy was the least important dimension in all four industries studied - bank, credit card, repair and maintenance and long distance telephone. Tangibles was found to be important in banks.

Bebko (2000) proved through their study of three services representing three different points in the intangibility continuum-telephone company (mostly intangible), pizza shop and book store, that consumers' expectations of services do vary based on the ``intangibility'' of the service, increasing as intangibility increases. In support of previous research, reliability was the most important dimension of service quality across all three services. There were significant differences between services in the other four dimensions. A consumer's expectations of reliability, responsiveness, assurance and empathy were all higher for the intangible services of the telephone company. The lowest consumer expectations were for the pizza shop service, where the outcome of the service was tangible (a pizza) and the process consisted of mostly unseen tangibles.

Hsieh and Hiang (2004) adopted the measure developed by Brady and Cronin (2001) and conducted a study among 536 responses in three service industries:
photograph developing shops, banks, and hospitals in Taiwan. Results suggested that the interaction quality, physical environment quality, and outcome quality had positive impacts on customer trust and satisfaction for the overall sample. For the search services, such as photo developing, most important is the service outcome quality. The physical environment quality is more important in experience and credence services. The interaction quality provided by employees has become a critical factor in credence services.

3.4.1.17 SERVICE QUALITY DIMENSIONS IMPORTANCE VARIES ACROSS COUNTRIES AND CULTURES

Researchers have yet to find universally applicable dimensions of service quality, which are applicable to all cultures and markets (Bolton and Myers, 2003).

The dimensionality of service quality and the importance of the dimensions differ across countries (Kettinger and Lee, 1995; Yavas, 1998). Berthon et al. (1999) point to socio-cultural differences that in part may be responsible for such problems. Donthu and Yoo (1998) found that customers’ cultural orientation affects their service quality expectations. Mattila (1999) found that customers with Western cultural backgrounds are more likely to rely on tangible cues from a physical environment to evaluate service quality than are their Asian counterparts. Liu, and Sudharshan (2000) found that customers from different cultures assigned different importance weights to the five Servqual (Parasuraman, Zeithaml and Berry, 1988) dimensions for measuring perceived service quality.


3.4.1.18 SERVICE QUALITY MEASUREMENT

DISCONFIRMATION PARADIGM-IMPORTANT ROLE OF EXPECTATIONS IN CUSTOMER’S EVALUATION OF SERVICES

Early conceptualizations of service quality measurement (e.g., Gronroos 1982, 1984; Parasuraman, Zeithaml, and Berry, 1985) are based on the disconfirmation paradigm. Sasser et al. (1978), Gronroos (1982), Lehtinen and Lehtinen (1982), Lewis and Booms (1983) and Parasuraman et al. (1985, 1988, 1991) concurred that, service quality, can be measured by comparing the expectations of customers with their perception of the actual service performance.

SERVICE QUALITY MEASUREMENT – PERCEPTIONS ONLY V/S DISCONFIRMATION

A major debate has focused on whether service quality should be measured as perceptions or as disconfirmation (Cronin and Taylor, 1992, 1994; Parasuraman, Zeithaml, and Berry, 1994; Teas, 1993, 1994). Researchers have raised several issues about problems with the disconfirmation model. In addition, all of these studies have been cross-sectional and it is yet to be determined whether the traditional disconfirmation model (based on difference scores) would be better supported in a longitudinal study. Some researchers (Andaleeb and Basu, 1994; Mittal and Lassar, 1996) measured perceptions as indicators of service quality (ignoring expectations completely) and found good predictive power in their studies. Relative to the data collection process, measuring only perceptions is attractive, because it requires half the number of items that the traditional disconfirmation approach requires.

Those who favor the perceptions approach (e.g., Cronin and Taylor, 1992) suggest that perceptions of service quality more closely match customer evaluations of the service provided. Parasuraman, Zeithaml and Berry (1994) counter that measuring service quality as disconfirmation (i.e., the difference between perceptions and expectations) is valid and better as, it allows service providers to identify gaps in the service provided.
3.4.1.19 SCALES FOR SERVICE QUALITY MEASUREMENT

SERVQUAL

The most popular model for service quality measurement based on disconfirmation paradigm has been SERVQUAL which was a result of several studies by Parasuraman et al(1988). Initially, Parasuraman, Zeithaml and Berry’s (1985)study developed a conceptual framework for the SERVQUAL model called the Gaps Model of Service Quality, where it was established that the quality that a consumer perceives in a service is a function of the magnitude and direction of the gap between expected service and perceived service.

Based on exploratory investigation of quality in four service businesses, Parasuraman et al (1985) identified ten determinants of service quality-reliability, responsiveness, competence, access, courtesy, communication, credibility, security, understanding/knowing the customer and tangibles.

SERVQUAL (1988)

Subsequent empirical research produced SERVQUAL (Parasuraman, Zeithaml and Berry,1988), a 22-item scale for measuring service quality along five dimensions: reliability, responsiveness, assurance, empathy, and tangibles. SERVQUAL operationalizes service quality by subtracting customers' expectation scores from their perception scores (gap scores) on the 22 items. Thus, their service quality measurement scale is comprised of a total of 44 items (22 for expectations and 22 for perceptions). Customers’ responses on their expectations and perceptions are obtained on a 7-point Likert scale and are compared to arrive at (P-E) gap scores. The higher (more positive) the perception minus expectation score, the higher is perceived to be the level of service quality.

SERVQUAL's five dimensions suggested the following labels and concise definitions for the dimensions:

Tangibles: Physical facilities, equipment, and appearance of personnel.
Reliability: Ability to perform the promised service dependably and accurately.

Responsiveness: Willingness to help customers and provide prompt service.

Assurance: Knowledge and courtesy of employees and their ability to inspire trust and confidence.

Empathy: Caring, individualized attention the firm provides its customers

Subsequently, Parasuraman et al. (1985) refined the model in 1988, 1991, 1993, and 1994. While the original SERVQUAL instrument has been revised and refined, its basic content, structure, and length have remained intact (Parasuraman, Berry, and Zeithaml, 1991).

3.4.1.20 REVISED SERVQUAL 1991 (SHOULD CHANGED TO WILL)

SERVQUAL (1988) was revised later by Parasuraman et al, (1991) based on the result of an empirical study on five service companies. Realizing that the “should” terminology in the original version might contribute to unrealistically high expectation scores, a slightly different wording (will) was adopted. The revised wording focused on what customers would expect from companies delivering excellent services. To illustrate, the statement, “Telephone companies should keep their records accurately,” was modified to the statement, “Excellent telephone companies will insist on error-free records”. Second, the negatively worded items in the original version were all changed to a positive format. Third, two new items were substituted for two original items to more fully capture the dimensions and to incorporate suggestions from managers. In a reassessment of SERVQUAL, Parasuraman, Berry and Zeithaml (1991) noted that customer perceptions of responsiveness and assurance overlapped. Tangibles split into two sub dimensions – physical facilities/equipment and employees/communication materials. The R Square obtained from regression analysis using the revised SERVQUAL appeared to be greater than 0.57 in all five service companies investigated.
3.4.1.21 SERVQUAL -1994

In 1994, Parasuraman, Zeithaml and Berry suggested some modifications to SERVQUAL approach. They proposed that service expectations exist at two different levels that customers use as comparison standards in assessing service quality.

Desired Service: The level of service, representing a blend of what customers believe “can be” and “should be” provided.

Adequate Service: The minimum level of service, customers are willing to accept.

The response scale was changed from a 7-point to a 9-point scale to offer respondents a wider range of rating choices in view of the need to capture two different expectation levels.

Incorporating the revised conceptualization of expectations (Zeithaml et al., 1993) Parasuraman, Zeithaml and Berry (1994) modified SERVQUAL's structure to capture not only the discrepancy between perceived service and desired service—labeled as measure of service superiority (or MSS)—but also the discrepancy between perceived service and adequate service—labeled as measure of service adequacy (or MSA).

Parasuraman, Zeithaml and Berry (1994) conducted a study to also compare 3 alternative service-quality measurement formats on psychometric and diagnostic criteria to address the unresolved methodological issues. The study also had a secondary objective: to incorporate the expanded conceptualization of expectations into the alternative scale formats. A variety of criteria were used to assess the performance of the three questionnaire formats. These criteria pertained to the service quality scales' factor structure, reliability, validity, and diagnostic value. All three formats contained the 22 attributes.

The three alternative service quality measurement formats, included in the pretest questionnaires, were:
1. Three-Column Format. This format generates separate ratings of desired, adequate, and perceived service with three identical, side-by-side scales. It requires computing the perceived-desired and the perceived-adequate differences to quantify MSS and MSA, respectively.

2. Two-Column Format. In contrast to the three column format, this format generates direct ratings of the service-superiority and service-adequacy gaps (i.e., MSS and MSA scores) with two identical, side-by-side scales.

3. One-Column Format. This format also generates direct ratings of the service superiority and service-adequacy gaps. However, the questionnaire is split into two parts, with Part I containing one set of scales for MSS and Part II containing the same set of scales for MSA. Thus, this format involves repeating the battery of items.

3.4.1.22 PRACTICAL IMPLICATIONS OF PARASURAMAN, ZEITHAML AND BERRY, (1994) STUDY

Parasuraman, Zeithaml and Berry’s (1994) study proved that the measures in all three questionnaire formats possess convergent and predictive validity. However, in terms of predictive power alone, the direct measure is superior to the difference-score measure.

PARASURAMAN, ZEITHAML AND BERRY (1994) ADMITTING PROBLEMS WITH 3 COLUMN FORMAT

Parasuraman, Zeithaml and Berry’s (1994) study concluded that, despite the three-column format questionnaire's superior diagnostic value, administering it in its entirety may pose practical difficulties, particularly in telephone surveys or when the list of 22 generic items is supplemented with more context-specific items as suggested by Parasuraman et al. (1991).
3.4.1.23 SERVQUAL USAGE

SERVQUAL was designed to be applicable across a broad spectrum of services. It has proved to be a concise multiple-item scale with good reliability, face validity and predictive/concurrent validity across a broad spectrum of services. SERVQUAL applications have been many-to determine the relative importance of the five dimensions in influencing customers' overall quality perceptions, segment customers based on perceptions and also compare across competitors.

SERVQUAL can serve as an effective diagnostic tool to guide management in its service quality improvement efforts by focusing attention in the areas that are most needful (Berry et al., 1994).

SERVQUAL is one of the most utilized scales both in academic and applied research settings, as its face validity has been acknowledged (Asubonteng et al.,1996).

However, support for the discriminant validity of SERVQUAL as reflected by the factor-loading patterns and the number of factors retained is inconsistent across studies. Finally, the usefulness of the expectations scores and the appropriateness of analyzing gap scores remain unresolved.

3.4.1.24 SERVQUAL USED IN VARIOUS INDUSTRIES

An important advantage of the SERVQUAL instrument is that it has been proven valid and reliable across a large range of service contexts, such as a dental school patient clinic, a tire shop (Carman, 1990), discount and department stores (Finn and Lamb, 1991; Teas, 1993), hospitals (Babakus and Mangold, 1992), real estate brokers (Johnson, Dotson and Dunlop 1988); physicians in private practice (Brown and Swartz, 1989); public recreation programs (Crompton and Mackay, 1989); motor carrier companies (Brensinger and Lambert ,1990); an accounting firm (Bojanic, 1991), a gas and electric utility company (Babakus and
Boller, 1992; banking, pest control, dry cleaning, and fast food (Cronin and Taylor, 1992); and higher education (Boulding et al., 1993).

Although it has been demonstrated that for some services the SERVQUAL instrument needs considerable adaptation (Dabholkar et al., 1996), it still seems the best alternative for cross-sectional research and industry benchmarking (Fitzsimmons and Fitzsimmons, 1994).

3.4.1.25 SERVQUAL DEBATE AND CRITICISM

Being a popular instrument, SERVQUAL has seen huge debate and controversy. The controversy centers around such issues as the dimensionality of the scale (e.g. Babukas and Boller, 1992; Mittal and Lassar, 1996; Peter et al., 1993), lack of constancy of factor structure across studies (Parasuraman et al., 1988), universal applicability across diverse industries (e.g. Carman, 1990), lack of convergent validity especially when judged by factor loadings of scale items on the intended factors (e.g. Headley and Miller, 1993), the wisdom of measuring expectations as well as perceptions, rather than just the perceptions (Cronin and Taylor, 1992, 1994; Oliver, 1993; Babakus and Boller, 1992; Brown et al., 1993; Dabholkar et al., 2000), and the interpretation and operationalization of expectations (e.g. Teas, 1993, 1994). Asubonteng et al. (1996) has given a comprehensive critical review.

3.4.1.26 SERVQUAL CRITICISM- EXPECTATIONS CONSTRUCT

The conceptualization and usefulness of the expectations side of the instrument has been questioned (Teas, 1993; Boulding et al., 1993; Cronin and Taylor, 1992, 1994; Forbes et al., 1986; Tse and Wilton, 1988). Second, the problems expectation scores pose in terms of variance restriction have been highlighted (Babakus and Boller, 1992; Brown et al., 1993). Third, there are problems associated with difference scores, including findings showing that the performance items on their own explain more variance in service quality than difference scores (Babakus and Boller, 1992; Cronin and Taylor, 1992, 1994).

Pointing to conceptual, theoretical, and measurement problems associated with the disconfirmation model, Teas (1993, 1994) observed that a (P-E) gap of magnitude ‘-1’ can be produced in six ways: P=1, E=2; P=2, E=3; P=3, E=4; P=4, E=5; P=5, E=6 and P=6, E=7 and these tied gaps cannot be construed as implying equal perceived service quality shortfalls. In a similar vein, the empirical study by Peter, Churchill and Brown (1993) found difference scores being beset with psychometric problems and, therefore, cautioned against the use of (P-E) scores.

Validity of (P-E) measurement framework has also come under attack due to problems with the conceptualization and measurement of expectation component of the SERVQUAL scale. While perception (P) is definable and measurable in a straightforward manner as the consumer’s belief about service experienced, expectation (E) is subject to multiple interpretations and as such has been operationalized differently by different authors/researchers (e.g., Babakus and Inhofe, 1991; Brown and Swartz, 1989; Dabholkar et al., 2000; Gronroos, 1990; Teas, 1993, 1994).

Initially, Parasuraman, Zeithaml and Berry (1985, 1988) defined expectation close on the lines of Miller (1977) as ‘desires or wants of consumers,’ i.e., what they feel a service provider should offer rather than would offer.

Expectations are defined by some other researchers as anticipated or predicted levels of product/service performance formed by advertising, word-of-mouth, or past experience (e.g., Barbaeu, 1985; Miller, 1977; Swan and Trawick, 1980).

There is a lot of criticism in the literature concerning the simultaneous measurement of expectations and perceptions. This approach assumes that expectations before the service are identical to expectations after the service, and does not account for the fact that expectations may change over time (Clow and Vohries, 1993; Carman, 1990; Caruana et al., 2000).
3.4.1.27 SERVPERF

Cronin and Taylor (1992) were amongst the researchers who leveled maximum attack on the SERVQUAL scale. They questioned the conceptual basis (based on both expectation and performance scores and gaps) of the SERVQUAL scale and found it confusing with service satisfaction. They, therefore, opined that expectation (E) component of SERVQUAL be discarded and instead performance (P) component alone be used. They proposed what is referred to as the ‘SERVPERF’ scale. Cronin and Taylor (1992) provided empirical evidence across four industries (namely banks, pest control, dry cleaning, and fast food) to corroborate the superiority of their ‘performance-only’ instrument over disconfirmation-based SERVQUAL scale. ‘Performance only’ scale SERVPERF is comprised of only 22 items. A higher perceived performance implies higher service quality. They concluded that an unweighted performance-based measure of service quality (unweighted SERVPERF) is a more appropriate basis for measuring service quality than SERVQUAL, weighted SERVQUAL, or weighted SERVPERF where weights are the importance of factors.

3.4.1.28 SUPPORT FOR SERVPERF

Considerable support has emerged over time in favor of the SERVPERF scale (Babakus and Boller, 1992; Bolton and Drew, 1991; Boulding et al., 1993; Churchill and Surprenant, 1982; Gotlieb, Grewal and Brown, 1994; Hartline and Ferrell, 1996; Mazis, Antola and Klippel, 1975; Woodruff, Cadotte and Jenkins, 1983). Bolton and Drew (1991) conclude that current performance ratings strongly affect attitudes whereas the effects of disconfirmation are generally insignificant and transitory.

In response to all criticisms, SERVQUAL's developers have presented counterarguments, clarifications, and additional evidence to reaffirm the instrument's psychometric soundness and practical value (Parasuraman et al. 1991, 1993; Parasuraman, Zeithaml and Berry, 1994).
3.4.1.29 SERVPERF V/S SERVQUAL

Numerous studies have been undertaken to assess the superiority of two scales, but consensus continues to elude as to which one is a better scale.

However SERVPERF is still lagging behind the SERVQUAL scale in application.

DISCONFIRMATION MEASUREMENT IN SERVQUAL –DIRECT (measured) V/S DIFFERENCE (computed) SCORES –DIRECT SCORE IS SUPERIOR

Another debate in the service quality literature centers on the use of (computed) difference scores versus the measured disconfirmation approach (e.g., Brown, Churchill, and Peter, 1993; Parasuraman, Berry and Zeithaml, 1993). This discussion addresses the issues related to using a computed difference score (a mathematical calculation of perceptions-minus- expectations) versus a measured disconfirmation score (a direct mental estimation of perceptions compared to expectations) to measure service quality. As Peter, Churchill, and Brown (1993) explain, the direct comparison measurement approach requires subjects to mentally consider differences rather than have the researcher calculate an arithmetic difference for them.

Critics of difference scores have suggested that direct (i.e., non-difference score) measures of the perception-expectation gap will be psychometrically superior as the computed difference scores for disconfirmation have problems of reliability, discriminant validity, and variance restriction (Carman 1990; Peter, Churchill and Brown, 1993; Brown et al, 1993). Scales directly measuring perceived performance relative to expectations have also been found to be less biased and more useful than scales merely measuring performance (Devlin, Dong and Brown, 1993).
A study by Dabholkar, Sheperd and Thorpe (2000) found that though perception measures are superior to disconfirmation, measured disconfirmation (direct score) was found to be superior to computed disconfirmation. Dabholkar, Sheperd and Thorpe (2000) suggested measuring perceptions rather than disconfirmation when the objective is to predict service quality or to gauge its determinants. If gap analysis is the objective, measured disconfirmation (direct) is recommended over computed disconfirmation.

While expectations are important, since it is operationally difficult to follow the Parasuraman, Zeithaml and Berry (1988) procedure for collecting expectations and perception data separately and analyzing these data, Carman (1990) suggested that it is advisable to collect the data in terms of the perception-expectation difference directly rather than to ask questions about each separately, especially where norms for expectations are well formulated.

3.4.1.30 GUIDELINES TO USING SERVQUAL --ADAPT

According to the authors Parasuraman, Zeithaml and Berry (1991), since SERVQUAL is the basic “skeleton” underlying service quality, it should be used in its entirety as much as possible. While minor modifications in the wording of items to adapt them to a specific setting are appropriate, deletion of items could affect the integrity of the scale. Context-specific items can be used to supplement SERVQUAL. However, the new items should be similar in form to existing SERVQUAL items (e.g., they should be general rather than transaction specific).

While SERVQUAL can be used in its present form to assess and compare service quality across a wide variety of firms or units within a firm, appropriate adaptation of the instrument may be desirable when only a single service is investigated (Parasuraman, Zeithaml and Berry 1988).
3.4.1.31 NEED TO ADJUST SERVQUAL TO INDUSTRY

Carman (1990) tested SERVQUAL in a dental school patient clinic, a business school placement center, a tire store and an acute-care hospital and concluded that the stability of the dimensions was impressive although not completely generic and recommended modifications to the instrument to be tailored to different service settings (add or delete items; customize wordings). He found that when one of the dimensions of quality is particularly important to customers, they are likely to break that dimension into sub dimensions.

3.4.1.32 NEED TO MODIFY SCALE FOR TELECOM

Researchers (Mangold and Babakus, 1991; Richard and Allaway, 1993) agree that both SERVQUAL and SERVPERF scales may not be comprehensive in capturing the service quality construct as both of them focus only on the functional quality attributes, and not on the technical quality attributes. Service quality modeling in cellular mobile services is not adequately investigated and needs to be modified (Seth, Momaya and Gupta, 2006).

3.4.1.33 WHICH MEASUREMENT SCALE FOR TELECOM – SERVQUAL OR SERVPERF?

For service quality measurement in telecommunication (including fixed line and cellular mobile services), researchers have supported both SERVQUAL as well as SERVPERF tools.

3.4.2 STUDIES ON CUSTOMER SWITCHING (CHURN) BEHAVIOR

Relationship marketing focuses on enhancing firm-customer relationships as a means to reduce customer switching, increase loyalty and overall firm performance (Sheth and Parvatiyar, 1995).

3.4.2.1 CONSEQUENCES OF SERVICE SWITCHING (CHURN)

There are negative effects of customer switching on market share and profitability (Rust and Zahorik, 1993). Costs associated with acquiring new customers can add up to five times the cost of retaining a customer (Peters, 1988).

Keaveney’s (1995) study showed that 75% of customers had told at least one other person, and usually several other people, about the service switching incident. Proximity was a factor – respondents told family, friends, neighbors, coworkers, and other known customers of the service. Only 7% of respondents told the original service provider.

3.4.2.2 REASONS FOR SWITCHING (CHURN)

Review of the services and product literature reveals a variety of potential, and sometimes conflicting, reasons that customers might switch services. For example, customer switching has been related to perceptions of quality in the banking industry (Rust and Zahorik, 1993), overall dissatisfaction in the insurance industry (Crosby and Stephens, 1987), and service encounter failure in retail stores (Kelley, Hoffman and Davis, 1993).

Factors such as prices, quality, brand name, customer service and competitive offerings have been identified as possible antecedents to customer switching (Ganesh et al., 2000; Keaveney and Parthasarathy, 2001; Bienenstock et al., 2004). Some recent studies suggest user related factors to play a significant role—their domain expertise (Burnham et al., 2003), users’ relational investments and service bundling and their demographics (e.g., Gwinner et al.,
1998; Bolton and Lemon, 1999; Keaveney and Parhasarathy, 2001; Burnham et al., 2003) to be significant antecedents to switching. Similarly, Chen and Hitt (2002) found both firm and user-related attributes to be associated with customer switching. Studies have identified a strong association between customer dissatisfaction and switching (Bolton and Bronkhorst, 1995; Bansal and Taylor, 1999; Lee et al., 2001).

Keaveney (1995) through a critical incident study conducted among more than 500 service customers in forty-five different services, identified more than 800 critical behaviors of service firms (classified into eight general categories) that caused customers to switch services. The largest category of service switching was core service failure (service mistakes, billing errors, service catastrophes) mentioned by 44% of respondents. Service encounter failures (employee attitude and behaviors) were the second largest category of service switching, mentioned by 34% of respondents. Price (high prices, price increases, unfair pricing practices, deceptive pricing practices) was the third largest switching category, mentioned by 30% of all respondents; inconvenience (20% of service switching incidents); employee responses to service failures (17%); attraction by competitors (approximately 10%) were some of the other reasons. Many customers switched to a better service even when the new provider was more expensive or less convenient. Ethical Problems (7%) and involuntary switching (6%) were other reasons.

3.4.2.3 SIMPLE VERSUS COMPLEX SERVICE SWITCHING (CHURN)

45% percent of respondents described switching incidents composed of a single behavior or factor. Core service failures, pricing problems, and service encounter failures were the most frequently mentioned simple causes of service switching.

The remaining 55% of critical switching incidents were complex. Critical switching incidents composed of two different categories (two – factor incidents) were reported by 36% of respondents. Of those, more than half described a core service failure compounded by another problem.
3.4.2.4 TRIGGERS OF SWITCHING (CHURN)

In general, a trigger is a factor or an event that changes the basis of a relationship and causes switching (Roos, Edvardsson and Gustafsson, 2004). Roos (1999, 2002) define situational and reactional triggers. Situational triggers alter customers’ evaluations of an offering based on changes in their lives or in something affecting their lives. E.g. demographic changes in the family, changes in job situations, and in economic situations. In telecommunications, situational triggers may trigger the need to replace or remove a type of service or subscribe to a different type of service. However, it may take considerable time before the switching path is complete (Keaveney, 1995; Roos, 1999).

Reactional triggers are those critical incidents of deterioration in perceived performance (Gardial, Flint and Woodruff, 1996). When something out of the ordinary occurs, such as a decline in performance, it redirects a customer’s attention to evaluate present performance more closely, which may put customers on a switching path (Roos, 1999, 2002).

According to Berry et al. (1990), breaking the service promise is the single most important way in which service companies fails their customers.

3.4.2.5 CUSTOMER SWITCHING (CHURN) EVEN IF SATISFIED

Service switching might be caused by price deals (Guadagni and Little, 1983; Gupta, 1988; Mazursky, LaBarbera and Aiello, 1987) or variety seeking (Kahn, Kalwani and Morrison, 1986)

Chintagunta and Monroe (1996) argued that the effect of true loyalty is a propensity to make repeat purchases enduring and constant over time, whereas, the effect of inertia is repeated purchase made passively without much thought, or despite having negative perceptions. Gupta et al. (1996) demonstrated how, the greater the degree of indifference displayed, the more likely they are to be
sensitive to special promotions, or similar attempts by competitors to attract them.

Huang and Yu (1999) claimed that since there is no underlying commitment among customers displaying inertia towards the product, such promotional tools as point of purchase displays, extra couponing, or noticeable price reductions would be adequate to unfreeze a customer’s habitual pattern.

3.4.3 STUDIES ON SWITCHING COSTS

Switching costs are generally defined as costs that deter customers from switching to a competitor’s product or service. They are known to be one of the key sets of antecedents to customer purchase loyalty and their importance is highlighted in the literature (Bateson and Hoffman, 1999; Lee et al., 2001). Switching costs are the “on time costs facing the buyer of switching from one supplier’s product to another” (Porter, 1980). These costs can be financial or psychological in nature (Burnham et al., 2003; Jones et al., 2002).

According to Fornell (1992), switching barriers refer to the difficulty of switching to another service provider that is encountered by a customer who is dissatisfied with the existing service or to the financial, social and psychological burden felt by a customer when switching to a new service provider.

Switching costs can lead businesses to falsely assume that all repeat purchase customers are truly loyal to their organization, when actually, many are less than satisfied, but perceive the costs of switching to an alternative supplier to be too high, and hence do not switch. (Dick and Basu, 1994)

Jones and Sasser (1995) mention switching costs as one factor that determines the competitiveness of market environment, since high switching costs discourage changing from a current provider, thereby yielding less incentive for firms to actively compete. Switching costs help businesses to overcome inevitable fluctuation in service quality (Jones et al., 2000). Switching cost gives firms some
advantages: (1) the costs reduce customers’ sensitivity to price and satisfaction level (Fornell, 1992) and (2) customers perceive functionally homogeneous brands as differentiated heterogeneous brands (Klemperer, 1987). Epling (2002) finds empirical evidence that consumers with high switching costs end up paying higher prices.

Bateson and Hoffman (1999) suggest satisfaction and switching costs are assumed to be the most important antecedents of repurchase behavior.

3.4.3.1 SWITCHING COSTS-MONETARY AND NON-MONETARY

In addition to objectively measurable monetary costs, switching costs may also pertain to time and psychological effort involved in facing the uncertainty of dealing with a new service provider (Dick and Basu, 1994; Guiltinan, 1989). A customer also faces a considerable psychological risk in switching to an alternative service provider because they cannot evaluate the service before actually purchasing it. Risk is higher when quality is difficult to judge or varies considerably across alternatives (Sharma and Patterson, 2000).

The level of competition and loyalty programs (e.g. membership programs, customer clubs) may increase the perceived and actual cost of switching (Gruen and Fergusson, 1994; Gummesson, 1995).

3.4.3.2 WHEN ARE SWITCHING COSTS HIGHER?

It has been argued that the costs of switching providers tend to be higher for services than for goods (Gremler and Brown, 1996). Quinlan (1991) argues that for some services (e.g. fast food restaurants, retailers) switching costs are low as a result of the fact that there are ample suppliers and “the inherent inability to differentiate on some valuation criterion” (Barnes and Cumby, 1995). In contrast, switching costs are high for services that are intrinsically difficult to evaluate, or for which there is only a limited number of suppliers (legal services, management consulting and medical services) (Brown and Swartz, 1989; Patterson and Johnson, 1993). Inexperienced customers typically perceive higher risk in
decision-making (Heilman et al, 2000). Past research has referred importance of the product or service, perceived spend on service (customer’s relative wealth), and perceived homogeneity in service in a given industry – as switching barriers(costs).(Lambert, 1998). Fornell (1992), during the Swedish Customer Satisfaction Barometer study found where supply is homogenous, customers could remain with a service provider even with low levels of satisfaction.

3.4.3.3 SWITCHING BARRIER (COSTS) AND CUSTOMER RETENTION-DIRECT LINK OR MODERATING VARIABLE

Most of the available evidence examines the direct relationship between switching costs and repurchase intentions (Ping, 1993). A review of literature suggests that higher switching costs are positively related to customer purchase loyalty (read retention) (Ping, 1993, 1997; Jones et al., 2002). Fornell (1992) was one of the first authors to consider switching costs, adding them to consumer satisfaction in the customer loyalty function. Fornell (1992) has noted that industries vary in how customer satisfaction affects repeat business and customer loyalty. He noted that the connection between customer satisfaction and loyalty depends on factors such as market regulation, switching costs, brand equity, existence of loyalty programs, proprietary technology, and product differentiation at the industry level. Hauser et al. (1994) also pointed out that consumers become less sensitive to satisfaction level as switching costs increase. Many scholars have explored the moderating effect of switching costs on customer satisfaction –loyalty relationships with mixed results (Burnham et al., 2003, Jones et al., 2000; Patterson and Smith, 2003; Lee and Cunningham, 2001).

3.4.3.4 TYPES OF SWITCHING COSTS

Klemperer (1987) identifies three types of switching costs: transaction, learning and contractual. Transaction costs are costs that occur when starting a new relationship with a provider and sometimes, also include the costs necessary to terminate an existing relationship. Learning costs represent the effort required by the customer to reach the level of comfort of knowledge acquired of using a
product but which may not be transferable to other brands of the same product. Contractual costs are directly firm-induced in order to penalize switching by customers. It includes examples such as repeat-purchase discounts or rewards and frequent flyer programs.

Besides these explicit costs, there are also implicit switching costs associated with decision biases and risk aversion. Such switching costs may comprise psychological and emotional costs.

Guiltnan (1989) identifies four types of switching costs: contractual, set-up, psychological commitment and continuity costs. The author uses Klemperer’s contractual costs while grouping together transaction and learning costs as setup costs. His psychological commitment costs refer to past expenditures, losses or sunk costs, while continuity costs reflect the opportunity costs and the high perceived risks associated with changing from a known service provider to another.

According to Jackson (1985) switching cost is the sum of economic, psychological and physical costs. Thibault and Kelley (1959) highlight the role of search costs incurred in selecting a new service provider that contributes to the continuance of a relationship.

Gremler and Brown (1996) suggested a model that included switching costs as an antecedent of customer loyalty. They defined switching costs as investment of time, money and effort, perceived by customers as factors that make it difficult to switch companies and gave the examples of habit, inertia, set up costs, search costs, learning costs, contractual costs, and continuity costs.

Gremler (1995) underlines the role of search costs and adds habit/inertia costs. The latter includes apathy and the lack of enthusiasm needed to change the service provider and is akin to Guiltnan’s (1989) continuity cost.
Huang and Yu (1999) conceptualized inertia as a non-conscious form of retention. They distinguished inertia from loyalty by the degree of consciousness involved in the decision to continue to purchase from the same service provider.

Turnbull et al. (2000) define confusion as ‘consumer failure to develop a correct interpretation of various facets of a product/service, during the information processing procedure. Papavassiliou (1995) and Mitchell et al., 2004 suggest that confusion arises from stimulus overload, stimulus similarity and conflicting, misleading, ambiguous or inadequate information conveyed through marketing communications. Even if information is presented accurately, consumers may misinterpret it (Jacoby and Hoyer, 1989).

**Burnham, Frels and Mahajan (2003), group service switching costs under three broad headings.** Informational switching costs primarily involve the expenditure of time and money and consist of evaluation costs, learning and set-up costs. Contractual switching costs involve the loss of financially quantifiable resources and consist of benefit loss and financial monetary loss. Finally, relational switching costs involve psychological or emotional discomfort due to the loss of identity and breaking of bonds and consist of personal relationship loss costs and brand relationship costs.

**Informational switching costs**

Evaluation costs: Evaluation costs or search costs are the time, energy and money required to identify a new supplier source (Sharma, 2003)

Set-up costs: Set-up costs are the time and effort costs associated with the process of initiating a relationship with a new provider(Klemperer,1995).

Learning costs: Learning costs are the time and effort costs of acquiring new skills or know-how in order to use a new product or service effectively (Burnham et al, 2003).
**Contractual switching costs**

Monetary-loss costs: These costs are those associated with one-time financial outlays that are incurred by switching providers (Porter, 1998)

Benefit-loss costs: Continued patronage of a provider often leads to the accrual of benefits and perquisites that are lost if the relationship is terminated (Jones et al., 2002)

**Relational switching costs**

Long–term relationships lead to an increase in client confidence about what they can expect to receive from the firm (Gwinner, Gremler and Bitner, 1998). Gwinner et al. (1998) suggest that long-term relationships lead to additional benefits for customers such as increased confidence in the product or brand, social engagement or relationships with service provider’s employees, and improved opportunities for customization. Accordingly, relationship length leads to the accumulation of switching barriers as perceived by clients (Becker, 1960; Jones, Motherbaugh and Beatty, 2002). As customer-organization relationships develop, customers become increasingly entrenched due to relationship-specific investments (Jones et al., 2002).

**3.4.3.5 SWITCHING COSTS IN CELLULAR MOBILE SERVICES**

In the context of cellular mobile services, it includes search and learning costs, subscription fee, cost of a new handset, cost involved in changing telephone number and loss of other benefits (Lee et al., 2001; Kim et al., 2004).
3.4.4 STUDIES ON BEHAVIORAL INTENTIONS

CUSTOMER RETENTION V/S CUSTOMER LOYALTY (DIFFERENT CONSTRUCTS)

Customer loyalty and retention has received major attention by researchers and corporate strategists alike. It is important to understand the differences between the two.

In the past, the terms customer retention and customer loyalty, have been used to describe the same phenomenon (Zeithaml et al., 1996; Reichheld and Sasser, 1990). According to Gerpott et al. (2001) customer retention and loyalty are distinct constructs. They state that customer retention is concerned with maintaining the business relationship established between a service provider and a customer in two ways - by creating switching barriers or creating favorable attitude towards the provider and the services he/she supplies. Customer loyalty is the term used when business relationships are continued in the latter way (Dick and Basu, 1994).

3.4.4.1 STRATEGIC IMPORTANCE OF CUSTOMER RETENTION

Customer retention has been advocated as an easier and more reliable source of superior performance (Fornell and Wernerfelt, 1987; Peters, 1988; Reichheld and Sasser, 1990). As the market growth slows down or market becomes more competitive, firms will attempt to maintain their market share by focusing on retaining their customers. (Lee et al., 2001).

Repeat purchases are important because they represent loyal customers who contribute to the expansion of market shares (Bolton and Winchell, 1989). Also, in the service sector, customer acquisition costs are generally higher than customer retention costs (Ennew, Binks and Chiplin, 1994). Therefore, small reductions in customer defection rates produce significant improvements in profitability, besides enhancing market shares for the organization.
Reichheld (1996) demonstrated why customer retention is so important. He estimated that, with an increase in customer retention rates of just 5 per cent, the average net present value of a customer increases by 35 per cent for software companies and 95 per cent for advertising agencies. In addition, a consistently high satisfaction level may generate a long-run reputation effect, thereby insulating firms by reducing customers' price sensitivity (Anderson and Sullivan, 1993).

Reichheld and Sasser (1990) assert that customer defections have a stronger impact on a company's profits than "scale, market share, unit costs, and many other factors usually associated with competitive advantage." For this reason, they extol the benefits of zero customer defections as an overall company performance standard. The longevity of a customer's relationship favorably influences profitability as initial costs of attracting and establishing these customers have already been absorbed and, due to experience curve effects, they often can be served more efficiently (Reichheld and Sasser, 1990).

Continuing customers increase their spending at an increasing rate, purchase at full-margin rather than discount prices, and create operating efficiencies for service firms (Reichheld and Sasser, 1990)

‘The costs of attracting a new customer have been found to be up to six times higher than the costs of retaining existing ones’ (Rosenberg and Czepiel, 1983)

Anderson and Sullivan (1990) find that a greater degree of service improvement is necessary to make a customer switch from a competitor than to retain a current customer.

3.4.4.2 RETENTION VERY IMPORTANT IN CELLULAR SERVICE INDUSTRY

Increase in customer retention results in increased profitability for firms that compete in mature, competitive markets; like telecommunications, banking,
hotels, airlines, to name but a few (e.g., Fornell and Wernerfelt, 1987; Reichheld and Sasser, 1990; Bolton, 1998; Rust, Zahorik and Keiningham, 1995).

In highly-competitive markets, it has been found that the easier the services provider can be replaced by an equally-suited alternative, the less likely the customer is going to be loyal over time (Oliver, 1999). Gerpott et al., (2001), noted that telecommunication services, being highly competitive and undifferentiated, customer retention is of greater importance to the success of the company than in other industry sectors.

The role of customer loyalty and retention becomes critical in the mobile phone market, since operators lose about 30 percent or more of their subscribers every year and have large customer acquisition expenditures (Lee et al., 2001).

3.4.4.3 FACTORS CAUSING SERVICE RETENTION

Bitner (1990) speculates that time or money constraints, lack of alternatives, switching costs, and habit might also affect service retention.

Aydin et al (2005) noted that switching costs and service quality are the most important factors for determining the customer retention. Kotler (1997) reported that switching costs are identified as playing a key role in the process of creating customer retention.

3.4.4.4 CUSTOMER LOYALTY

Customer loyalty is the term used when business relationships are continued by creating favorable attitude towards the provider and the services he/she supplies, instead of creating switching barriers which will lead to customer retention but not customer loyalty (Dick and Basu, 1994).

3.4.4.5 CUSTOMER LOYALTY IN SERVICES IS HIGHER
Research into customer loyalty has focused primarily on product-related or brand loyalty, whereas loyalty to service organizations has remained underexposed (Gremler and Brown, 1996).

There are a number of reasons why findings in the field of product loyalty cannot be generalized to service loyalty (Keaveney, 1995; Gremler and Brown, 1996). As personal interactions form an essential element in the marketing of services (Czepiel and Gilmore, 1987; Surprenant and Solomon, 1987; Crosby et al., 1990; Czepiel, 1990) service loyalty is more dependent on the development of interpersonal relationships as opposed to loyalty with tangible products. Consumers may be less likely to switch after they have developed a relationship with the service provider (Macintosh and Lockshin, 1998). Furthermore, as the influence of perceived risk is greater in the case of services due to intangibility which makes evaluating service quality difficult, customer switching is less likely (Zeithaml, 1981; Klemperer, 1987; Guiltinan, 1989). Indeed, it has been demonstrated that loyalty is more prevalent among service customers than among customers of tangible products (Snyder, 1986).

3.4.4.6 CUSTOMER LOYALTY AND COMPANY PERFORMANCE

Understanding the lifetime value of a customer (Zeithaml and Bitner, 1996), means that developing a long-term customer relationship is paramount (Gronroos, 1990, 1991; Peters, 1988) to an organization’s survival.

Customer loyalty is a prime determinant of long-term financial performance of firms (Jones and Sasser, 1995). It is particularly true for service firms where increased loyalty can substantially increase profits (Reichheld and Sasser, 1990; Reichheld, 1996). Service firms focus on achieving customer satisfaction and loyalty by delivering superior value, an underlying source of competitive advantage (Woodruff, 1997). A loyal customer base will generate more predictable sales, steady cash flow and an improved profit stream (Reichheld and Sasser, 1990; Aaker, 1991).
Various researchers (Heskett et al., 1997; Griffīn, 1995; Mittal and Lassar, 1998; Oliver, 1999; Reichheld, 1996) found that the relationship between customer satisfaction and organizational profits is not a direct one, but it is moderated by other variables including customer retention and loyalty.

Raj (1985) found that firms with large market shares also have larger groups of loyal consumers. **Loyal customers are less motivated to search for alternatives, are more resistant to counter – persuasion from other brands, and are more likely to pass along positive word-of-mouth communication about the service to other customers** (Dick and Basu, 1994).

Moreover, it is known that as customer loyalty increases, the sensitivity of the customer to price decreases (Krishnamurthi and Raj, 1991)

### 3.4.4.7 ANTECEDENTS OF CUSTOMER LOYALTY

Researchers have identified several essential elements of relationship, which includes care, support, loyalty, honesty, trustworthiness, respect for privacy, trust among others (Duck, 1991; Argyle and Henderson, 1985; Gupta, 1983) Relationship benefits may increase the willingness of the customers to develop relational bonds (Morgan and Hunt, 1994; Reynolds and Beatty, 1999; Hennig-Thurau et al., 2002). Human interaction is another factor that drives customer loyalty (Pieters and Bottschen, 1999). Specific relational constructs are friendship (Gremler, 1995), social comfort (Argyle, 1992), and social regard (McGarry, 1995; Dotson and Patton, 1992) taking an interest in the customer (Bitran and Hoech, 1990; and respecting the customer (Barnes, 1997).

The relationship management literature emphasizes two different dimensions of relationship commitment that drive loyalty: affective commitment, as created through personal interaction, reciprocity, and trust, and calculative commitment, as caused by lack of choice and switching costs (Bendapudi and
Another antecedent could be seller expertise, which reflects the knowledge, experience and the overall competence of a seller (Crosby et al., 1990; Lagace et al., 1991).

Conflict negatively influences the customer’s trust and commitment toward the seller (Anderson and Weitz, 1992). Empirical evidence suggests that service failures may weaken the customer-company bond even when the problem is resolved satisfactorily (Bolton and Drew, 1992). Zeithaml, Berry and Parasuraman’s (1996) findings show that customers experiencing no service problems have the strongest levels of loyalty intentions and the weakest switch and external response intentions.

Gummesson (1996) proposes that, fulfillment of the service promise may inspire a long-term relationship, positively affecting long-term customer loyalty and sustainance, and subsequently reduce the likelihood of customer defection.

In the services context, intangible attributes such as reliability and confidence may play a major role in building or maintaining loyalty (Dick and Basu, 1994). Customers will remain loyal to a service organization if the value of what they receive is determined to be relatively greater than that expected from competitors (Zeithaml and Bitner, 1996).

Customers commonly desire personalized and close relationships with service providers (Parasuraman et al., 1991); moreover, customers value the benefits of maintaining the relationship (Zeithaml et al., 1996).

Relational investments e.g. relationship duration with service provider results in increased user confidence about what they can expect to receive from the provider (Gwinner et al., 1998). Users also tend to gain considerable knowledge and expertise due to increased duration of their relationship with a service provider (Park et al., 1994) and could perceive higher switching costs to defect to another
provider. Another factor is service usage. Keaveney and Parthasarathy (2001) found that users who had switched their internet service providers had lower levels of usage.

Synder (1991) found some correlations between demographic variables and strong services loyalty.

3.4.4.8 LOYALTY STRATEGIES USED BY FIRMS

Many organizations have realized that maintaining excellence on a consistent basis is imperative if they are to gain customer loyalty. This long-term perspective has created a strong shift in orienting service strategy towards a service promise (Albrecht, 1988; Albrecht and Zemke, 1985; Hart, 1990).

In order to create customer loyalty, service firms create satisfaction by 1) raising service quality (Anderson and Sullivan, 1993; Brady and Robertson, 2001; Kristensen and Gronholdt, 2000) (2) ensure subscribers’ trust in the firm (Morgan and Hunt, 1994; Lau and Lee, 1999) and (3) develop a switching cost, making it costly for customers to change service providers (Fornell, 1992).

3.4.4.9 CUSTOMER LOYALTY MEASUREMENT FOR SERVICES

Initially, brand loyalty (whose focus was products) was simply measured in terms of its outcome characteristics (Jacoby and Chestnut, 1978). This involved determining the sequence of purchase (Brown 1952, 1953; Lawrence, 1969; McConnell, 1968; Tucker, 1964), proportion of purchase devoted to a given brand (Cunningham, 1956), probability of purchase (Frank, 1962; Maffei, 1960; Farley, 1964) and purchase frequency (Brody and Cunningham, 1968).

According to Oliver (1999) loyalty is an attained state of enduring preference. Oliver (1999) defines loyalty as “a deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior”.

76
Day (1969) criticized behavioral measures, such as repeat purchasing and purchasing sequence, for a lack of a conceptual basis and for having a narrow, i.e. outcome focused view of what is in fact a dynamic process (Day, 1969). For instance, a low degree of repeat purchasing of a particular service may very well be the result of situational factors such as non-availability, variety seeking and lack of provider preference. Furthermore, repeat purchasing behavior may not even be based on a preferential disposition but on various bonds that act as switching barriers to consumers (Storbacka et al., 1994; Liljander and Strandvik, 1995). Authors have long recognized the problems associated with treating loyalty as repurchase behavior exclusively as such measures do not distinguish spuriously loyal customers (Moulson, 1965). By focusing on purchase, shoppers who are retained customers by default are aggregated with truly loyal customers who shop as a positive choice (Denison and Knox, 1995).

**Day (1969) argued that “there is more to brand loyalty than just consistent buying of the same brand- Attitudes for instance”.** Building on this work, other researchers provided a conceptualization of brand loyalty that incorporated both a behavioral and an attitudinal component (Jacoby, 1969, 1971; Dick and Basu, 1994).

Dick and Basu (1994) supplemented the behavioral approach with the concept of relative attitude. They posit that true loyalty only exists when repeat patronage co-exists with a high relative attitude. Attitude denotes the degree to which a consumer’s disposition towards service is favorably inclined (Azjen and Fishbein, 1980). Loyalty is customer preference for the service ahead of competition. (e.g. Dick and Basu, 1994; Gremler and Brown, 1997; Oliver, 1999).

Attitudinal approaches include saying positive things about the company to others (Boulding et al., 1993), brand recommendations (Parasuraman, Berry and Zeithaml, 1991; Parasuraman, Zeithaml and Berry, 1988; Reichheld and Sasser, 1990), resistance to changing service providers (Oliver, 1997), contrary to self-interest (Gilmore and Czepiel, 1987) or an immunity to the pulls of competition (Stum and Thiry, 1991); sense of ownership over the service (Gabbott and Hogg,
1994) and a sense of belongingness (Bhattacharya et al., 1995) willingness to pay price premium (Zeithmal et al., 1996) and repurchase intention (Cronin and Taylor, 1992; Anderson and Sullivan, 1993).

In contrast to the classical additive model (e.g. Dick and Basu, 1994), researchers such as Blodgett et al. (1997) distinguish loyalty as a psychological outcome and repurchase intentions as a behavioral outcome. That is, the constructs perform differently. A psychologically loyal customer may not intend to purchase from a service because their circumstances prevent them (Barnes, 1997). In support, Czepiel (1990) and Kingstrom (1983) have argued strongly for loyalty as a psychological construct.

Gremler and Brown’s (1969) definition of service loyalty incorporates the three specific components of loyalty considered, namely: the purchase, attitude and cognition. Gremler and Brown (1996) defined service loyalty as follows: “service loyalty is the degree to which a customer exhibits repeat purchase behavior from a service provider, possesses a positive attitudinal disposition toward the provider, and considers using only this provider when a need for this service arises”.

In addition to attitude, it has been argued that loyalty may also be based on cognition. (Gremler and Brown, 1996; Sirohi et al., 1998; Lee and Zeiss, 1980; Oliver, 1996). Berger and Mitchell (1989) showed that the degree to which consumers are exposed to advertising increases the ability and confidence to process information, providing more opportunity for product-related elaboration resulting in product commitment. Cognitively, customer loyalty is frequently operationalised as a conscious evaluation of the price/quality ratio or the willingness to pay a premium price, or alternatively price indifference (Fornell, 1992; Olson and Jacoby, 1971; Pessemier, 1959; Raju et al., 1990; Zeithaml et al., 1996).

These elements are present in the behavioral intentions battery that was developed by Zeithaml et al. (1996) with regards to services loyalty. *Zeithaml et al. (1996)*
operationalised customer loyalty to consist of repurchase intentions, positive word of mouth, less price sensitivity and less likely to complain.

Oliver (1996) argues that customer loyalty is reached through four sequential stages- cognitive loyalty, affective loyalty, conative loyalty, action control loyalty. Oliver (1996) argues that ‘consumers operating only at the cognitive level are hypothesized to be most susceptible to switching caused by marketing overtures while those “fully integrated” consumers at the level of action loyalty are hypothesized to be least susceptible’. Oliver (1996) holds that action loyalty includes routinised and habit behavior. The inertia brought about by time constraints on corporate customers is one such example that impedes switching.

3.4.4.10 LOYALTY CLASSIFICATION SCHEME

Jones and Sasser (1995) present a very intuitive classification of an individual's link between satisfaction and loyalty. Customers are classified into four different groups: loyalist/apostle (high satisfaction - high loyalty), defector/terrorist (low satisfaction - low loyalty), mercenary (high satisfaction - low loyalty), and hostage (low satisfaction - high loyalty).

Javalgi and Moberg (1997) developed a conceptual framework of loyalty classification which looked at 2 factors-relative attitude (high, low) vis a vis repeat patronage (high, low).

Latent loyalty exists when a consumer has a strong preference for or attitude toward a company’s brand over its competitors’ brands, but does not exhibit high repeat patronage due to some situational or environmental variable. eg in restaurants because of a desire for variety in meals. Spurious loyalty occurs when a consumer repeat purchases a brand, but sees no significant differences among brands and hence has relatively low attitude. This could occur if there were no alternatives in a category or if choice is made strictly on past experiences and habits. No loyalty exists in a category when consumers see few differences.
between alternative brands and there are low repeat purchases. Finally, loyalty is defined as when both relative attitude and repeat purchase is high.

Using Lovelock’s (1983) classification, Javalgi and Moberg(1997) hypothesized that following factors affect the nature of loyalty

- nature of service act-(tangible vs intangible actions)and (directed to people vs goods)
- relationships with customers-(continuous delivery of service vs discreet transactions) and (membership vs no formal relationship)
- customization and judgment in service delivery-(high vs low judgment needed to be exercised by employees) and (high vs low customization)
- method of service delivery.(customer goes to service organization, vs service organization comes to customer vs customer and service organization transact at arm’s length) and (availability at single vs multiple sites)

Understanding this classification, it would seem that cellular services would fall under the following categories

- It is tangible service directed at goods and hence has spurious loyalty.
- There is continuous delivery of service and a membership relationship and hence spurious loyalty
- Extent of judgment exercised by service employee low and customization of service is low(responsibility is of customer and similar options available),hence there is spurious loyalty or no loyalty
- Method of delivery is at arm’s length and at multiple sites,hence there is no loyalty

3.4.4.11 SERVICE LOYALTY CONSTRUCT

The operationalization of the construct of service loyalty has often remained limited, ignoring the full range of conceivable loyalty reactions that may follow
the evaluation of a service (Zeithaml et al., 1996). Cronin and Taylor (1992), for instance, focused solely on repurchase intentions (measuring this construct as a single item), while Boulding et al. (1993) operationalised repurchase intentions and willingness to recommend. As Zeithaml et al. (1996) argue, dimensions of loyalty, such as, for instance, willingness to pay more and loyalty under increased pricing have often been left out in previous research.

3.4.4.12 ZEITHAML’s (1996) BEHAVIOURAL INTENTIONS BATTERY

With regards to behavioral intentions(read manifestation of customer loyalty) in a services setting, Zeithaml et al. (1996) proposed a comprehensive, multi-dimensional framework of customer behavioral intentions in services. This framework was initially comprised of the following four main dimensions:

(1) Word-of-mouth communications;

(2) Purchase intention;

(3) Price sensitivity; and

(4) Complaining behavior.

On the basis of factor analysis on the 13-item scale, five dimensions were identified by Zeithaml et al. (1996):

(1) Word of mouth ;

(2) Propensity to switch (Repurchase Intention);

(3) Willingness to pay more (Price Sensitivity);

(4) External response to problem; and

(5) Internal response to problem.

3.4.4.13 CUSTOMER LOYALTY – WORD OF MOUTH DIMENSION
The first loyalty behavior identified by Zeithaml, Berry and Parasuraman (1996) is word of mouth. Substantial previous research (e.g., Zeithaml, Berry and Parasuraman, 1996; Bloemer, deRuyter and Wetzels, 1999; Szymanski and Henard, 2001) has investigated the relationship between customer loyalty and positive word-of-mouth behaviors. Loyal customers become an advocate for the service (Payne, 1993) by providing positive word-of-mouth (e.g. Zeithaml et al., 1996; Andreassen and Lindstead, 1998), recommending the service to others (Stum and Thiry, 1991; Fisk et al., 1990), encouraging others to use the service (Kingstrom, 1983; Bettencourt and Brown, 1997), and defending the service provider (Kingstrom, 1983). According to McGarry (1995), while a satisfied customer is merely a passive recipient of service, the loyal customer feels a positive connection to the service provider. Loyal customers become active ambassadors for the business.

### 3.4.4.14 Importance of Word of Mouth

Word of mouth sources are perceived to be independent, trustworthy, reliable, credible and less biased as they are often based on experience (Smith and Swinyard, 1983; Murray, 1991; Edgett and Parkinson, 1993; Muthukrishnan, 1995). Edgett and Parkinson (1993) found that consumers tend to seek out family and friends advice more often when purchasing a service, because of the lack of tangible evidence to help them to evaluate the purchasing decision. Consumers are more inclined to choose a neutral information source since these “provide an excellent source of both positive and negative information” (Cox, 1967).

Research has found consumers in collective cultures such as India and Thailand are more likely to seek family and friends’ opinions than consumers from individualistic cultures such as the UK and the USA (Childers and Rao, 1992; Lindridge, Hogg and Shah, 2004).

Several studies (e.g., Brown, 1997; Tax, Brown and Chandrashekaren, 1996) indicate that upset customers may tell, on average, 10 to 20 people about their negative experiences.
In Keaveney’s (1995) study, respondents were asked if they had found a new service provider and, if so, how they had identified the new provider. Approximately half found the new service firm through word-of-mouth communications, references, and referrals.

3.4.4.15 CUSTOMER LOYALTY – REPURCHASE INTENTION DIMENSION

The second loyalty behavior identified by Zeithaml, Berry and Parasuraman (1996) is repurchase intentions. Oliver (1999) defines loyalty as “a deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior”

3.4.4.16 CUSTOMER LOYALTY – PRICE SENSITIVITY DIMENSION

Price sensitivity, the third behavior, refers to the magnitude of change in demand as a result of price variations. Customer loyalty is frequently operationalised as a conscious evaluation of the price/quality ratio or the willingness to pay a premium price, or alternatively price indifference (Fornell, 1992; Olson and Jacoby, 1971; Pessemier, 1959; Raju et al., 1990; Zeithaml et al., 1996).

3.4.4.17 CUSTOMER LOYALTY – COMPLAINT BEHAVIOR DIMENSION

The fourth loyalty behavior is exhibited by the amount of customer complaints. Complaining is viewed by many researchers as a combination of negative responses that stem from dissatisfaction and predict or accompany defection (Richins, 1983; Scaglione, 1988). A consumer’s complaining behavior is most likely a result of dissatisfaction with the service and their perceptions of value received for the price paid. (Fornell and Wernerfelt, 1987; Fornell and Rust, 1997)
3.4.4.18 DOES SERVICE QUALITY LEAD TO SERVICE LOYALTY OR BEHAVIORAL INTENTIONS? -MIXED RESULTS

It has remained unclear whether or not there is a direct relationship between service quality and loyalty. Customer loyalty can be gained by increasing the customer satisfaction through raising the offered service quality (Fornell et al., 1996; and Brady and Robertson, 2001). Boulding et al. (1993) found positive relationships between service quality and repurchase intentions and willingness to recommend whereas Cronin and Taylor (1992) failed to find one (in contrast to the significant positive relation between satisfaction and repurchase intention). Most studies that have examined the service quality-service loyalty relationship, focused on one specific industry only, limiting the generalizability of results (e.g. Crosby and Stephens, 1987; Kelley et al., 1993; Rust and Zahorik, 1993).

Parasuraman and Grewal (2000) suggest that quality enhances perceived value, which in turn, contributes to customer loyalty. Previous studies (Parasuraman, Berry and Zeithaml, 1991; Parasuraman, Zeithaml and Berry, 1988), find a positive and significant relationship between customers' perceptions of service quality and their willingness to recommend.

Although the “cognitive evaluations – emotional responses – behavioral intentions” link is conceptually the strongest in explaining how customers form their behavioral intentions, many studies have also found a direct positive link between service quality perceptions (arguably a cognitive evaluation) and customer behavioral intentions (e.g. Boulding et al., 1993; Zeithaml et al., 1996).

Zeithaml, Berry, and Parasuraman (1996) found that perceived service quality has (a) positive effects on loyalty to a company and willingness to pay more and (b) negative effects on propensity to switch and to engage in an external response to a problem. But they did not find any significant effects of service quality on internal response to a problem.
3.4.4.19 SERVICE QUALITY-SERVICE LOYALTY LINKAGES DIFFER INDUSTRY TO INDUSTRY

Ruyter, Wetzels and Bloemer (1998) studied five service industries. Respondents were interviewed on service quality, service loyalty dimensions and switching costs. Health centers and city theatres were chosen as examples of service industries with relatively high switching costs while three service industries with relatively low switching costs were selected: fast food, supermarkets and amusement park. It was found that the influence of service quality on preference loyalty generally varies per industry. **Ruyter et al (1998) established that in industries characterized by relatively low switching costs, customers will be less loyal both in the preference and price indifference sense as compared to service industries with relatively high switching costs.**

3.4.4.20 RELATIONSHIP BETWEEN OVERALL SERVICE QUALITY AND INDIVIDUAL SERVICE LOYALTY DIMENSIONS

The relationship between overall service quality and individual service loyalty dimensions has also been examined empirically by Boulding et al. (1993) and Cronin and Taylor (1992). Cronin and Taylor (1992) focused solely on repurchase intentions, whereas Boulding et al. (1993) focused on both repurchase intentions and willingness to recommend. In the study by Cronin and Taylor (1992), service quality did not appear to have a significant (positive) effect on intentions to purchase again, while Boulding et al. (1993) found positive relationship between service quality and repurchase intentions and willingness to recommend. Zeithaml et al. (1990) reported a positive relationship between service quality and willingness to pay a premium price and to remain loyal even when prices go up. With regards to the response to a negative service experience, it has been suggested that the majority of customers simply remain inactive and do not undertake any action (Day, 1984). Furthermore, responding to dissatisfaction (e.g. by switching, complaining directly to the company or complaining to a third
party) is negatively related to the level of perceived service quality (Singh, 1991; Kelley et al., 1993). In addition, personal factors e.g. attribution (Folkes, 1994) and situational variables determine to a large extent behavioral intentions in response to dissatisfaction.

3.4.4.21 RELATIONSHIP BETWEEN SERVICE QUALITY DIMENSIONS AND INDIVIDUAL SERVICE LOYALTY DIMENSIONS

Bloemer, Ruyter and Wetzel’s (1999) study found that the relationship between the dimensions of perceived service quality and dimensions of service loyalty varied from industry to industry. For instance, while word-of-mouth is predominantly determined by responsiveness and tangibles in the entertainment industry, word-of-mouth in the fast food industry is mainly influenced by assurance and empathy. In the entertainment industry, customer patronage behavior is predominantly influenced by reliability, responsiveness and tangible service attributes; in the fast food business, patronage and recommendation are dependent on the personalized service through empathy and assurance.

3.4.4.22 STUDY OF SERVICE QUALITY IMPACT ON RETENTION—HOW MUCH OF SERVICE QUALITY IS NECESSARY?

An important unresolved issue is the service-quality level that companies must target to have the desired impact on behaviors. How much service quality is enough to retain customers?

A study by Gale (1992), which quantitatively assesses the relationship between level of service quality and willingness to purchase at AT&T, offers some indirect insight.

Of AT&T's customers who rated the company's overall quality as excellent, over 90% expressed willingness to purchase from AT&T again. For customers rating the service as good, fair, or poor, the percentages decreased
to 60%, 17% and 0% respectively. These results suggest that the impact of service quality on willingness to repurchase is most pronounced in intermediate level of service quality.

Having delineated the various constructs and concepts relevant to the thesis—namely service quality, switching costs and behavioral intentions constituting brand loyalty, the following section concentrates on research papers in the telecom sector with special focus on cellular mobile services in several countries, and in India.

3.4.5 CELLULAR MOBILE SERVICES - INTERNATIONAL STUDIES

Bolton and Drew’s (1991) paper presented their study of 408 residential telephone subscribers in 1985 with items framed specifically in terms of the telecommunications industry (rather than framed generically as they are in SERVQUAL). Their study results show the importance of reliability (or trouble-free service) and responsiveness (willingness to help customers). The service provider cannot entirely regain customer goodwill even if the problem is rectified by courteous personnel. Residential customers with no experience with another telephone service provider have higher assessments of overall quality than customers with such experience. For those customers with alternative carrier experience, quality assessment depends on perceptions of current versus prior telephone service quality. Overall quality also depends on whether the customer perceives telephone service to have improved in the past year. Heavy users of local telephone service, rate service quality (defined as function of expectations, performance and disconfirmation), higher than light users.

Bolton and Drew (1991) also showed disconfirmation explains a larger proportion of the variance in service quality than performance, whereas, in
prior studies, performance explains a larger proportion of the variance in customer satisfaction than disconfirmation (Churchill and Surprenant, 1982). Also disconfirmation experiences were found to be more important in assessing telephone service value than in assessing telephone service quality. Bolton (1998) finds a positive effect of overall customer satisfaction on the duration of the relationship for cellular phone customers, and Bolton and Lemon (1999) show a positive effect of overall satisfaction on customer usage of telecommunications subscription services.

In their study in the New Zealand's telecom services industry, Danaher and Gallagher (1997) identified that certain attributes of the personnel delivering the service, such as friendliness and competency, more strongly influence overall service quality than other factors viz. clear voice and time taken to respond.

Woo and Fock (1999) in a study of the mobile phone industry in Hong Kong among 891 customers, investigated determinants of customer satisfaction in the Hong Kong mobile phone services sector, using a perception-based approach (expectations were not covered). They conducted an exploratory factor analysis on twenty attributes followed by confirmatory factor analysis and obtained four determinants of customer satisfaction viz. transmission quality and network coverage (network coverage, transmission quality, image), pricing policy (service package variety and pricing), staff competence (competence and helpfulness) and customer services (billing accuracy, service centre location, convenient business hours, quality of repairs and maintenance, customer communication). Transmission quality and coverage was found to be the most important factor and customer services being the least important factor. **The role of pricing in determining users' satisfaction is less important than transmission and network quality, in such a highly technology-driven industry.** This illustrates that customers of mobile phone service are relatively more quality-conscious.

Turnbull, Leek and Ying (2000) studying cell phone users in UK, found that the reason consumers change their networks frequently, is mostly due to their
dissatisfaction with the billing systems provided by the service providers, rapid price changes and quality improvements among networks. The findings imply customers try to find the cheapest possible charges package with satisfactory quality. It is interesting to note that out of the total, 56% respondents agree that mobile phone operators are using the same technology and only 25% of the respondents perceive that technology is different among networks. More respondents (46.1%) agree that network operators are providing similar services than disagree with it (32.9%).

Gerpott et al. (2001), through a structural equation modeling (SEM) approach, found that customer retention, customer loyalty and customer satisfaction are important goals for the telecommunications operators in the German mobile telecommunications market. Results also indicated that network quality, assessment of price and personal benefits had positive and significant effect on customer satisfaction. Mobile service price, personal service benefit perceptions and number portability had the strongest effects on customer retention.

Leisen and Vance’s (2001) study of 76 telecom customers in USA and 200 in Germany using confirmatory analysis suggests that service quality is remarkably important to overall satisfaction with telephone service. For the US sample, reliability is the only important dimension of service quality. For the German sample, reliability, responsiveness and empathy contribute significantly to overall satisfaction.

Lee, Lee and Feick’s (2001) study confirmed the existence of the moderating role of switching costs in the customer satisfaction-loyalty link among 256 customers of Mobile phones in France. They identified customer segments based on calling time plan chosen- economy (<2 hrs), standard (2-4 hrs), mobile lovers (>4 hrs) and then examined differences in the satisfaction-loyalty link. They found that switching costs play a significant moderating role in the satisfaction-loyalty link only for the economy and standard groups. For mobile lovers, switching costs do not affect loyalty. Thus, it seems that, as the number of calling hours exceeds a certain level, switching becomes difficult and users accept whatever the company
has to offer. Consumers in the economy and standard groups consider the quality of core services most important, mobile-lovers show their strong attachment to value-added services. Mobile-lovers are less sensitive to the pricing aspects of services. In other words, the level of satisfaction on pricing was much less significant for heavy users than for regular users.

Johnson and Sirikit (2002) conducted their study on 484 consumers, both landline and mobile users of Thailand telecommunication industry using the SERVQUAL. SERVQUAL reliability was confirmed. They concluded that SERVQUAL is appropriate for the telecommunication services field but needs adaptation. Their study found that the telecommunication industry received strong ratings on tangible dimension of service quality, and lower ratings on empathy dimension. Results did not find support for the proposed link between service quality ratings and behavior intentions.

Using SEVPERF scale with some modifications for service quality measurement of cellular services, Wang and Lo( 2002) found that network quality and empathy are the most important drivers of overall service quality in China’s mobile phone market. Service quality has positive impact on customer satisfaction. Study revealed that price perceptions and indifference moderated the relationship between service quality and customer retention.

Van der Wal,Pampallis and Bond (2002) conducted study on 583 customers of cellular services. They found SERVQUAL is a reliable instrument for the measurement of service quality in the telecommunications industry in South Africa. Tangibles and reliability are loading in separate factors. The remaining three dimensions, responsiveness, assurance and empathy all load into one factor, indicating that there is no real differentiation amongst the three dimensions in the customer’s mind. “Responsiveness” dimension is first in order of importance to the customer.

Surveys conducted by Oftel (2002) to determine factors that could influence the choice of network operator revealed, around 59% of consumers indicated the cost
of using mobile services as the critical choice factor, compared with coverage and reception quality, which was mentioned by 21% of consumers.

Athanassopoulos and Iliakopulos(2003) studied 2,900 residential customers of fixed line services in the Greece telecom sector, and found that the perceived performance of the telecommunications company, is primarily driven by the corporate image, the product functionality, and the billing process. Less significant were found to be the transaction elements of perceived performance, namely the case of directory inquiries and the operation of the branch network. Study also suggests that the satisfaction attributes of continuous transaction (product quality and company image) would have higher impact on the overall perceived performance compared to the incident driven transactions. However, the positive covariance between some of the incident satisfaction indicators and some of the elements of continuous transaction (product quality and corporate image) indicate that the incidents have an indirect impact which shapes customer perceptions of product quality, billing, and corporate image in the long run.

In a postal survey among 432 fixed line residential telephone customers of a UK service provider, Ranaweera and Neely’s study (2003) indicated significant positive linear effects of service quality perceptions, price perceptions, and indifference on customer retention. **Service quality is indeed an important driver of customer retention, even in a mass service.** The study also confirmed that in mass services with low customization and customer contact such as the fixed line telephone sector, price perceptions and perceived customer indifference will moderate the relationship between service quality perceptions and repurchase intentions. **However there was inadequate evidence to support hypotheses the higher the level of inertia, the greater the level of customer retention.**

Caruana's(2004) study among 200 corporate mobile customers in France using canonical correlation analysis supported the relationships between higher contractual switching costs exhibited by corporate customers of mobile telephony and stronger cognitive loyalty, between higher relational switching cost and
stronger affective and conative loyalty and partial support for information switching costs and action loyalty.

In another study, Wang et al. (2004) investigated the impact of quality-related factors on customer value and customer satisfaction using structural equation modeling (SEM) in China. They used the SERVQUAL (Parasuraman et al., 1988) factors to measure service quality, but added "network quality" as another antecedent of customers' perceived service quality. Results indicated that all the service quality factors had significant and positive impact on customer satisfaction. Also customer perceived value had a moderating effect on the service quality and customer satisfaction link.

Turel and Serenko’s (2004) study examining the antecedents of satisfaction and loyalty through an empirical study of 80 cellular subscribers in Ontario, Canada using the ACSI model, found that the model adequately describes the behavior of mobile phone users. The ACSI score for the Canadian mobile services (57.86) was relatively low compared to the scores reflecting customer satisfaction in other industries, even lower than those of cable companies and satellite TV providers.

It was found that there is a positive association between perceived customer expectations and perceived quality of mobile services, between perceived quality and perceived value, between perceived quality and customer satisfaction, between perceived value and customer satisfaction. There is a positive association between customer satisfaction and repurchase likelihood from a particular provider of mobile services and between customer satisfaction and price tolerance with respect to a particular provider of mobile services. There is a negative association between customer satisfaction and customer complaints. However, positive association between perceived customer expectations and perceived value, between perceived customer expectations and customer satisfaction and negative association between customer complaints and repurchase likelihood, between customer complaints and price tolerance with respect to a particular provider of mobile services was not proved. There was difference between prepaid and post paid on perceived value with prepaid finding more value.
The study showed that cell phone users will consider changing a current provider if it raises prices by 13%, whereas they may tolerate any competitive price reductions up to 20%.

Kim et al. (2004) investigated the effect of different service features and switching barriers on customer satisfaction and customer loyalty in the Korean mobile telecommunication services sector. Using SEM, they found that customer satisfaction is significantly and positively affected by call quality, value added services and customer support. They also found that customer satisfaction and switching barrier had a significant and positive impact on customer loyalty.

Aydin and Ozer (2005) in their study of 1,950 GSM users in Turkish mobile phone market used the SEM technique and found customer satisfaction relates positively with customer loyalty. Each switching cost dimension (evaluation costs, setup costs, learning cost, benefit loss cost, uncertainty cost) relates positively with customer loyalty except monetary loss cost which was found to have no significant effect on customer loyalty. The perceived benefit-loss cost and the perceived uncertainty cost are the switching cost dimensions that have strongest correlation with customer loyalty. While links between customer loyalty and monetary loss cost and learning cost is higher in postpaid, links between customer loyalty and benefit loss cost is higher in prepaid. Also, customer satisfaction relates positively with uncertainty cost. The study proved that trust in the firm relates positively with customer satisfaction, with customer loyalty and with uncertainty cost.

Goode et al(2005) in a study of 232 consumers in UK using both multiple regression and neural network analysis, identified key determinants of overall customer satisfaction for mobile phones as primarily four important factors: experience with a mobile phone's product quality, the level of call charges, the level of service charges and satisfaction with the service provider. Increased age appeared to contribute to greater satisfaction with a mobile phone service.
Gustafsson et al (2005) conducted the research among 2715 customers of a large Swedish telecommunications company that provides fixed phone service, mobile phone service, modem-based internet service, and broadband internet service. They found that churn decreases with satisfaction, increases with prior churn, and decreases for fixed-phone customers. Prior churn influences future churn is consistent with Mittal and Kamakura’s (2001) findings. Whereas calculative commitment has negative effect on churn, affective commitment does not predict churn. Customer satisfaction has more (less) influence on churn for those customers who are inherently prone to stay (switch).

Ranganathan et al (2006) studied the switching behavior of 30950 mobile users in USA and found that relational investments-service usage, service duration and service bundling has inverse relationship with switching, with service usage as the strongest antecedent followed by bundling and relationship duration.

Leek and Chansawatkit’s study (2006) of 156 Thai mobile phone customers showed that customers found variety of hand sets, tariffs and technology of networks confusing in that order. Also, age and sex did not influence perceptions of the networks or tariffs.

Lai et al ‘s(2007) study of 137 customers in China telecom sector using SERVQUAL established the validity and reliability of the instrument. Exploratory and confirmatory factor analysis showed service convenience is an important additional dimension of service quality in China’s mobile communications setting. The dimension of “empathy” needs revision. Based on factor analyses, a three-tier structure of SERVQUAL dimensions emerged. The three most critical dimensions in the first tier are “responsiveness”, “assurance”, and “empathy”. The second tier includes the “reliability” and “convenience” dimensions, while the third tier includes only the “tangible” dimension.

Jahanzeb and Jabeen(2007)studied two telecommunication service providers in Pakistan- Telenor and Ufone. Analysis reveals that subscribers’ dissatisfaction with any dimension of price, voice quality and network coverage are the main
reasons for customer churn at both Ufone and Telenor. Ufone has comparatively better customer satisfaction and hence has lower churn than Telenor.

**Gyzybowski’s study (2008)** in UK based on consumer panel data to estimate switching costs showed that consumers face significant switching costs which differed across network operators. Also, consumers decide to switch to an alternative network operator when the increase in the value of its services exceeds switching costs. Older consumers are less willing to switch which is consistent with the findings of the Oftel (2002) survey. Interestingly, consumers who spend more of their free time reading books and doing housework are more willing to switch.

Butt and Cyril de Run’s (2008) study among 124 customer in Pakistan showed factors that contribute to customer satisfaction in varying degrees- Price is the most important component, (contributes to 32% of variance) followed by core service delivery (14%) followed by support services (billing accuracy etc) and ease of usage.

A study was done by Negi (2009) among 227 mobile users in Addis Ababa, Ethiopia using modified Servqual instrument with additional dimensions related to network quality, complaint handling, and service convenience. The study revealed that three dimensions (reliability, empathy and network quality) significantly contributed to overall service quality and customer satisfaction, with reliability being the highest. Also it was found that customer satisfaction does not necessarily lead to customer loyalty.

The study by Blery et al (2009) among 180 mobile telephony users in Athens, Greece, in November 2007 using SERVPERF (Cronin and Taylor, 1992) proved that perceived service quality positively influences repurchase intention and word of mouth while perceived price is negatively associated with repurchase intention.
3.4.5.1 USER DEMOGRAPHICS AND SWITCHING BEHAVIOUR IN CELLULAR MOBILE SERVICES

Lu et al. (2005) argued for looking beyond behavioral beliefs and examining personal traits and user attributes to better understand mobile user behavior.

Female users tend to experience higher levels of anxiety than males in using technologies (Igbaria Chakrabarti, 1990; Brosnan and Davidson, 1996). In the context of mobile internet technology, Gilbert et al. (2003) found females to exhibit more technophobia and anxiety towards mobile technologies. This anxiety is likely to prevent them from switching from one provider to another.

Turnbull et al. (2000) found women experience more confusion than men in the mobile phone industry. They also found younger consumers were less likely to experience confusion in the mobile phone industry than the older consumers.

Leung and Wei (2000) found significant gender differences in mobile phone usage. Market research studies report young users to be heaviest users of mobile services as well as highly prone to defection (Myring, 2003).

Ranganathan et al’s(2006) findings indicate that male users are relatively more prone to switching mobile service providers. They found a significant, positive association between higher levels of weekend usage (users using for non-work related purposes) and switching behavior.

3.4.6 CELLULAR MOBILE SERVICES-INDIAN STUDIES

In an exploratory study of residential and business customers of cellular mobile services in India, Seth, Momaya and Gupta (2005) found most of the customers were dissatisfied with customer care services—the poor complaint redressal mechanism and billing performance of their service provider, hidden costs as also unfulfilled promises and poor after sales service. Younger customers (within the
age group 18-35) who were dissatisfied were more ready to switch as compared to older customers (above 40 yrs). Despite customer dissatisfaction, some of the customers were reluctant to change their current service provider owing to the following reasons- confusion regarding the service offerings and complex tariff plans provided by other competitors, the cost and energy involved in informing so many people about change in their number and locked in contract. They presented a typology of various levels of Loyal customers based on 2 factors-Customer satisfaction (high, Low) and customer retention (high, low) and identified four categories of customers-true loyalist(high on both customer satisfaction and retention);Purchased loyalists(high customer satisfaction but low retention);wanderers(low on both);Trapped(low satisfaction and yet high customer retention) and they called for need for different strategies for each of the categories.

Rahman (2006)used SERVQUAL to study 1008 respondents in Delhi of four cellular service providers (Airtel, BSNL, Hutch and Idea).Results show that the Indian cellular telecommunication industry received strong ratings on the tangibles dimensions, particularly the employees’ neat and professional appearance, and low ratings on empathy dimension, particularly service providers’ interest differences. Airtel holds an advantage over others in the area of perceived tangibles, reliability, responsiveness, and empathy. Hutch holds an advantage over others in the area of assurance. To the customers, the most important dimension was reliability. The second most important dimension was empathy, followed by responsiveness, assurance. Finally, the least important dimension was tangibles. The largest discrepancies were found along “reliability” dimension. This is alarming since it was identified as the most important dimension.

Krishnan and Kothari (2008) studied 189 customers of five mobile operator providers in Rajasthan to analyze the antecedents of customer relationships in the telecommunication sector. Variety of service and customer services, tested
significant for the desired relationship features. Other variables such as price, accuracy in billing, information, employee behavior and advertisements were not significant.

**Seth, Momaya and Gupta (2008)** presented their paper based on study of 230 cellular mobile service customers in Jan-March 2005, on the key dimensions of service quality that are important to cellular mobile users. In addition to SERVQUAL dimensions, two additional dimensions—convenience and network quality were added. Results showed that perceived service quality is influenced by all the seven dimensions with responsiveness as the most important dimension, followed by reliability, network quality, assurance, convenience, empathy in that order and tangibles appearing to be the least important. Results also showed that customers seemed to be dissatisfied with the quality of services delivered.

**Eshghi, Roy and Ganguli (2008)** studied 255 mobile phone users using convenience sampling, in four cities of India viz. Delhi, Kolkata, Mumbai and Hyderabad. Factor analysis resulted in factors—transmission quality, reputation, support features, reliability, competitiveness and relational quality. The study looked at relationship between service quality factors on one hand and customer satisfaction, recommendations as well as repeat purchase intentions. Regression analysis revealed that competitiveness and reliability had the greater impact on customer satisfaction than the other factors while support factors are not significant. Market reputation and support features are not significant whereas the other four factors of transmission quality, relational quality, reliability and competitiveness are highly significant and impacts "recommendation of services to others" positively."Support features" is not significant, whereas other five factors—transmission quality, reputation, reliability, competitiveness and relational quality impact the repurchase intention positively and significantly. Transmission quality had the least impact on repeat purchase intentions followed by competitiveness whereas relational quality and reliability had the highest impact on repeat purchase intentions of customers.
Ganguli’s (2008) paper based on same study on 255 respondents from Delhi, Mumbai, Kolkata and Hyderabad, showed that except the dimension of market reputation and customer convenience, the rest of the five dimensions are significantly differentiating between the satisfied and dissatisfied customers - network quality, process quality, service competitiveness, reliability, support services. **With an increase in age, the satisfaction level increases. Female customers are more satisfied than the male ones. Also, with more amount of time spent on a particular network, customers become more satisfied. The customer group of students, housewives and retired persons are less satisfied than service people or business people, prepaid customers are more satisfied than the postpaid ones. As the amount of cellular phone usage (in rupees) per month is increasing for customers, the chance of customers being dissatisfied is more.**

The study by Chadha and Kapoor (2009) on 250 prepaid GSM customers of cellular mobile services in Ludhiana and Chandigarh, adopted SERVQUAL instrument and additional dimensions namely, customer perceived network quality, pricing structure, convenience, and value added services. The study looked at three factors - perceived service quality, switching costs, customer satisfaction and its impact on customer loyalty and found positive associations in all the three relationships and also that customer satisfaction is the most significant predictor of customer loyalty.

Balaji’s (2009) study of 199 Indian mobile post paid service customers, using the American Customer Satisfaction Index (ACSI) model investigates the antecedents of customer satisfaction and also examines the impact of customer satisfaction on price tolerance and customer loyalty as well as trust.

While the study supported the relationships between perceived expectations- perceived value and perceived expectations- perceived quality, it did not support the perceived expectations- customer satisfaction relationship. The study also found positive impact of perceived quality-perceived value, perceived quality- customer satisfaction but the relationship between perceived value and customer
satisfaction was not supported. Also, customer satisfaction was found to affect repurchase likelihood, price tolerance and trust. However trust-repurchase likelihood relationship was not supported.

The results show that perceived quality is an important predictor of customer satisfaction for mobile services in India. The insignificant relationship between perceived value and customer satisfaction suggests that mobile service subscribers perceive the price for the quality of services provided is high.

3.5 FRAMEWORK FOR THE RESEARCH STUDY

The literature review of the research papers resulted in the following

- It helped in building a comprehensive theoretical framework through an understanding of all variables and their interrelationships mentioned in all the research papers.

- The literature review also helped this researcher in understanding of gaps and limitations of all current researches in the area of Service Quality of Cellular Mobile Services worldwide and also gaps in Service Quality research of Cellular Mobile Services with specific reference to India.

- The Gap analysis then helped this researcher to articulate the need for this study, and to formulate the aims and objectives for the purpose of this thesis study.

- A modified theoretical model visually depicting the concepts and their interrelationships was then formulated for the specific purpose and use in this thesis study, based on the main and important concepts and interrelationships that the researcher wished to study in detail.

- The modified theoretical model along with the gap analysis has been the basis of the hypothesis formulation for the study in this thesis.
3.6 BASIS OF THE PROPOSED MODEL

This researcher used the following model as basis for this thesis study modified in the following manner

- The concepts and inter-relationships that form part of the title of this thesis (Service Quality and Behavioral Intentions) are accepted as basis for this study. Switching Costs, though not part of the original title, has also been selected for study by this researcher. For this study, links between Service Quality and Behavioral Intentions, has been accepted as established link in past literature domain.

- It is important to note also that while the classical ASCI model looks at Desired Service Expectations and Perceived Service Quality separately, this modified model combines the two concepts and looks at a direct score of Perceived Service Quality vis a vis Desired Service Expectations. The reasons for the same have been explained in the conclusions section of the literature review chapter as also explained later in the research methodology chapter.

- While the Service Quality dimensions emerging out of the research papers in general, were five in number (SERVQUAL instrument by Parasuraman, Zeithaml and Berry, 1994) the researcher has decided to use ten dimensions to evaluate Service Quality of Indian Cellular Mobile Services (the need to adapt SERVQUAL when using for specific industry was explained earlier in literature review chapter).

- Thus, for the Indian Cellular Mobile Service sector, five dimensions have been added (Network Quality, Convenience, Complaint Handling, Value Added Services and Price Competitiveness) to SERVQUAL’S (Parasuraman, Zeithaml and Berry, 1994) five dimensions (Reliability, Responsiveness, Empathy, Assurance, Tangibles) making for ten dimensions in all (Sources explained later in the research methodology chapter)
3.7 MODEL FOR STUDY OF SERVICE QUALITY OF CELLULAR MOBILE SERVICE SECTOR

Given below is the model which has been the basis for the hypotheses formulation for study in this thesis.
FIGURE 3.1 MODEL FOR STUDY OF SERVICE QUALITY OF CELLULAR MOBILE SERVICE SECTOR
3.8 CONCLUSIONS FROM LITERATURE REVIEW

The literature review has resulted in the following conclusions

1. Service quality leads to five behavioral consequences of word of mouth, repurchase intentions, price increase tolerance, external response to complaints and internal response to complaints.

2. Switching costs affects cellular mobile service sector.

3. SERVQUAL (Parasuraman, Zeithaml and Berry, 1988) is a more popular tool for measurement of service quality compared to Servperf (Cronin and Taylor, 1992). SERVQUAL measures five dimensions of service quality.

4. The makers of SERVQUAL (Parasuraman, Zeithaml and Berry, 1988) have admitted that SERVQUAL needs to be adapted when used for a study of a particular industry.

5. The disconfirmation paradigm of comparing the desired service expectations with the perceived service quality performance in SERVQUAL, though originally measured via a computed difference score (Parasuraman, Zeithaml and Berry, 1988)- which involves separately scoring the desired expectations and the perceived performance ratings and then manually arrive at the difference, the authors admitted to the practical problems of using the computed difference score format, especially when adapting the scale for a particular industry. It may lead to additional items and make the instrument very unwieldy to administer. They found the direct score format (asking the respondents on what score they would give for the perceived performance vis a vis their desired expectations) also valid in their exercise that compared the various formats of gathering information (Parasuraman, Zeithaml and Berry, 1994).
6. Delineation of all the research papers in service quality of cellular mobile services in India and abroad brought out the various gaps and limitations of current researches, helping in building the framework of the research study, basis of the proposed model and the model itself. This further lead to the objectives and hypotheses of this study. (Gaps and limitations of previous studies, Objectives and Hypotheses of this research work have already presented in the first chapter on introduction, as per written instructions of SNDT university and hence have not been repeated here.)