Chapter II: Theoretical Background for the Study:

Literature Review

This chapter looks at the literature related to the topic of research and provides the reader with a theoretical background for the study. It also gives an explanation of the theoretical rationale of the problem being studied, the research work carried out earlier and their findings that are related to the research issue in this topic culminating in the development of a conceptual framework and research objectives.

The service sector accounts for more than half the GDP (Gross Domestic Product) in most developing economies and for two-thirds or more in many highly developed economies. The service sector encompasses a large variety of industries, including many activities provided by public sector and nonprofit organizations. (World Economic Situation and Prospects, 2007) Services are responsible for the creation of a substantial majority of new jobs, both skilled and unskilled, in these economies. Service businesses govern modern economies and are the subject of academic research.

Service Business Is a System

The types of encounters that take place during service delivery depend to a great extent on the level of contact customers have with the service provider. A service business can be viewed as a system made up of three overlapping elements (Chase, 1978):

- Service operations, whereby inputs are processed and the elements of the service product are created.
➢ **Service delivery**, during which final “assembly” of these elements takes place and the product, is delivered to the customer.

➢ **Service marketing**, which embraces all points of contact with customers, including advertising, billing, and market research. (Lovelock et al, 2004)

**Service Attributes**

Service performances, especially those that contain few tangible clues, can be difficult for consumers to evaluate, both in advance of purchase and even afterwards. As a result there is a greater risk of making a purchase that proves to be disappointing. (Zeithaml, 1981).

➢ **Search Attributes**

Tangible attributes help customers understand and evaluate what they will get in exchange for their money and reduces the sense of uncertainty or risk associated with the purchase occasion.

➢ **Experience Attributes**

When attributes can’t be evaluated prior to purchase, customers must experience the service to know what they are getting.

➢ **Credence Attributes**

Product characteristics that customers find impossible to evaluate confidently even after purchase and consumption are known as credence attributes because the customer is forced to trust that certain benefits have been delivered, even though it may be difficult to document them. An example would be patients can’t usually evaluate how well, the doctors have performed complex procedures. (Lovelock et al, 2004)
Intangibility of Service Performance

Providers of services that are high in credence characteristics have an even greater challenge. Their benefits may be so intangible that customers can’t evaluate the quality of what they’ve received even after the service has been purchased and consumed. (Lovelock et al, 2004)

Service Process Classification

Numerous proposals have been made for classifying services. (Lovelock et al, 1983). Of particular significance is the classification based on the nature of the processes by which services are created and delivered. A process is a particular method of operation or a series of actions, typically involving multiple steps that often need to take place in a defined sequence. A process implies taking an input and transforming it into an output. Two broad categories of things get processed in services: people and objects. (Lovelock et al, 2004)

A pure operational perspective, of service processes can categorize them into four broad groups. (Morris & Johnston, 1987) Each category involves fundamentally different processes. The categories are referred to as people processing, possession processing, mental stimulus processing, and information processing. (Lovelock et al, 2004)

People Processing – To receive these types of services, customers must physically enter the service system. As customers are an integral part of the process, they cannot obtain the benefits they desire by dealing at arm’s length with service suppliers; instead, they must be prepared to spend time interacting and actively cooperating with service providers.
Information Processing - Information is the most intangible form of service output, but it may be transformed into a more enduring, tangible form, represented by letters, reports, books, tapes, or disks. Among the services that are highly dependent on effective collection and processing of information are financial and professional services, such as medical diagnosis etc.

Possession Processing – Customers are less physically involved with this type of service than with people processing services. In most Possession processing services, the customer’s involvement is usually limited to dropping off the item that needs treatment, requesting the service, explaining the problem and later returning to pick up the item and pay the bill.

Mental Stimulus Processing – These are services that interact with people’s minds like education, news and information, professional advice etc. Anything touching people’s minds has the power to shape attitudes and influence behaviour. (Lovelock et al, 2004)

Relating the above mentioned processes to a remote health care setting, it is seen that both people and information processing takes place. People processing takes place, as the people i.e. the customers of health care service have to physically visit a Telemedicine/ Remote health care center to get treatment. Hence the customer i.e. the patient has to physically enter the service system to receive service. Information processing takes place, as the information (medical diagnosis) is provided via the telecommunication network by specialist doctors who are not physically present in the health care center.
**Nature of the Service Offering**

When designing a service to implement a particular service marketing concept, product planners need to take a holistic view of the entire performance they want customers to experience. The design task must therefore address and integrate three key components: the core product, supplementary services, and delivery processes. (Eiglier et al, 1977)

**Core Product**

This central component addresses two questions: What is the buyer really purchasing? & Which customer needs are getting satisfied? The core product along with the tangible and augmented product supplies the benefits that customers seek.

**Supplementary Services**

These elements augment the core product, both facilitating its use and enhancing its value and appeal. The extent and level of supplementary services often play a role in differentiating and positioning the core product. Adding supplementary elements or increasing the level of performance can add value to the core product and enable the service provider to charge a higher price.

The combination of core product and supplementary services is often referred to as the *augmented product.* (Lovelock et al, 2004)
Delivery process

The third component deals with the procedures used to deliver both the core product and each of the supplementary services. The design of the service offering must address how the various service components are delivered to the customer, the nature of the customer's role in those processes, how long delivery lasts, and the prescribed level and style of service to be offered.

Each of the four categories of processes – people processing, possession processing, mental stimulus processing, and information processing – have different implications for customer involvement, operational procedures, the degree of customer contact with service personnel and facilities, and requirements for supplementary services. (Lovelock et al, 2004)

Documenting the Delivery Sequence over Time

A fourth design component that product planners must address is the probable sequence in which customers will use each of the core and supplementary services and the approximate length of time that will be required in each instance. (Lovelock et al, 2004)

The Services Marketing Mix

The 4 Ps – (Product, Price, Promotion and Place) of the Marketing mix are not enough to capture the distinctive nature of services as they are strategies used for products (McCarthy, 1960). In case of services, three more Ps are exhibited in the process of
service creation and consumption, i.e., physical environment, process and people in order to capture the service performance. (Lovelock et al, 2004)

These 7Ps of services marketing represent a set of interrelated decision variables facing managers of service organizations. (Booms et al, 1981). They are as follows:

➢ **Product Elements**

Managers must select the features of both the core product—either a good or a service – and the bundle of supplementary service elements surrounding it, with reference to the benefits desired by customers and how well competing products perform.

➢ **Place and Time**

Delivering product elements to customers involves decisions on the place and time of delivery, as well as on the methods and channels used. Delivery may involve physical or electronic distribution channels or both, depending on the nature of the service being provided. Speed and convenience of place and time for the customer are becoming important determinants in service delivery strategy.

➢ **Promotion and Education**

Effective communication is imperative for any marketing program, wherein it plays three vital roles: providing needed information and advice, persuading target customers of the merits of a specific product, and encouraging them to take action at specific times. In services marketing, most communication is educational in nature, especially for new customers. (Lovelock et al, 2004)
➢ *Price and Other User Outlays*

This component addresses management of all the outlays incurred by customers in obtaining benefits from the service product. Consequently, services marketing strategy is not limited to the traditional pricing tasks of determining the selling price to customers, setting margins for any intermediaries, and establishing credit terms. Marketers must understand and, where feasible, seek to minimize other outlays that customers are likely to incur in purchasing and using a service. These outlays may include additional monetary costs (such as travel expenses to a service location), time expenditures, unwanted mental and physical effort, and exposure to negative sensory experiences.

➢ *Physical Environment*

The appearance of buildings, landscaping, vehicles, interior furnishing, equipment, staff members, signs, printed materials, and other visible cues all provide tangible evidence of a firm’s service quality. Service firms need to manage physical evidence carefully, as it can have a profound impact on customers’ impressions.

➢ *Process*

Creating and delivering product elements to customers require the design and implementation of effective processes. Badly designed processes often lead to slow, bureaucratic and ineffective service delivery, and result in dissatisfied customers.

➢ *People*

Many services depend on direct interaction between customers and a firm’s employees. The nature of these interactions, strongly influences the customer’s perceptions of service quality. (Hartline et al, 1996); (Lovelock et al, 2004)
**Service Factory Design**

The nature of customer involvement often varies sharply among the four categories of service processes namely, people processing, possession processing, information processing and mental stimulus processing.

When customers visit a service factory which is unavoidable in case of people processing services, their satisfaction will be influenced by such factors as the appearance and features of both exterior and interior service facilities, encounters with service personnel, interactions with self-service equipment, and the characteristics and behavior of other customers. When the nature of the service requires customers to be physically present throughout delivery, the process must be designed with them in mind, from the moment they arrive at the service factory. (Lovelock et al, 2004)

**Alternative Channels for Service Delivery**

Unlike the situation in people-processing services, managers responsible for possession-processing, mental stimulus-processing, and information-processing services do not require customers to visit a service factory. Instead, these managers may be able to offer a choice from one of several alternative delivery channels. Possibilities include, letting customers come to a user-friendly factory, limiting contact to a small retail office, or “back office” that is separate from the main factory, coming to the customer’s home or office, and, conducting business via phone, fax, e-mail or a Web site. Both physical and electronic channels allow customers and suppliers to conduct service transactions at arm’s length.
Electronic distribution channels offer even more convenience, as transportation time can be eliminated. For instance, using telecommunication links, engineers in a central facility, which could be located in another corner of the world, may be able to identify problems in defective computers and software at distant customer locations and transmit electronic signals to correct the defects. (Lovelock et al, 2004)

Rethinking service-delivery procedures for all but people-processing services may allow a firm to get customers out of the factory and deliver the service at arm’s length, wherein the design and location of the factory can focus on purely operational priorities. The chances of success in such an endeavor will depend on how well the customer accepts the new approach which in turn will be enhanced if the new procedures are user friendly, cost-effective, and offer customers greater convenience. (Lovelock et al, 2004)

**Distributing Services**

Delivering a service to customers involves decisions about where, when, and how. The rapid growth of the Internet and now also broadband mobile communications means that service marketing strategy must address issues of place, cyberspace, and time, paying at least as much attention to speed, scheduling, and electronic access as to the more traditional notion of physical location and logistics. (Lovelock et al, 2004)
Distribution In a Services Context

In the services context, experiences are generated and hence cannot be shipped and stored. Informational transactions in services are increasingly conducted via electronic, not physical, channels. In a typical sales cycle, distribution embraces three interrelated elements: (Light, 1986); (Lovelock et al, 2004)

> Information and promotion flow — The objective is to get the customer interested in buying the service

> Negotiation flow - The objective is to sell the right to use a service

> Product flow - Many services, especially those involving people or possession processing, require physical facilities for delivery. In this case, the distribution strategy requires development of a network of local sites. In the case of Information-processing services, such as Internet banking transactions, or remote medical consultations as in the case of Telemedicine; the product flow can be undertaken via electronic channels, using one or more centralized physical sites.

The Type of Contact: Options For Service Delivery

Decisions on where, when and how to deliver service have an important impact on the nature of customers’ service experiences because they determine the types of encounters, if any, with service personnel and the price and other costs incurred to obtain the service.

Several factors shape distribution and delivery strategies. The main question is whether the nature of the service or the firm’s positioning strategy requires customers to be in direct physical contact with its personnel, equipment, and facilities. This is inevitable for people-processing services but optional for other categories. Customers can visit the facilities of
the service organization, or the latter can send personnel and equipment to customer’s own sites. Alternatively, transactions between provider and customer can be completed across multiple locations through the use of either telecommunications or physical channels of distribution. (Light, 1986); (Lovelock et al, 2004)

➢ **Customers Visit the Service Site**

The convenience of service factory locations and operational schedules assumes great importance when a customer has to be physically present – either throughout service delivery or even only to initiate and terminate the transaction. The tradition of having customers visit the service site for services other than in the people-processing category is now being challenged by advances in telecommunications and business logistics, which are leading to a shift to services delivered at arm’s length.

➢ **Service Providers Go to Their Customers - In this case, the supplier visits the customer.**

➢ **Service Transaction Is Conducted at Arm’s Length -** Dealing with a service firm through arm’s-length transactions may mean that a customer never sees the service facilities and never meets the service personnel face-to-face. An important consequence is that the number of service encounters tends to be fewer; those encounters that do take place with service personnel are more likely to be made by telephone or even more remotely, by mail, fax or e-mail, for example service delivered through call centres. (Lovelock et al, 2004)
In remote health care service, (i.e. Telemedicine), the Customers Visit the Service Site (i.e. the Tele healthcare center). The location of the Service Factory (i.e., Telemedicine center) is in the geographical vicinity of the patient. High contact services involve personal visits by customers to the service facility. Customers are actively involved with the service organization and its personnel during service delivery. As the customer (i.e. the patient) physically visits the Service Factory, this part of the service is a high contact people–processing service. This would be a part of the Supplementary service in remote health care services, which together with the Core service forms the complete service.

On the other hand, the Core Service Transaction Is Conducted at Arm’s Length, as the specialist doctor offering the core service (medical consultation) is not physically present at the Service Site. This information is delivered via impersonal channel of service delivery through telecommunication networks. Hence this part of the service is a low contact information processing service.

**Service Environments**

Service environments, also called servicescapes, (Bitner, 1992), relate to the style and appearance of the physical surroundings and other experiential elements encountered by customers at service delivery sites. (Lovelock et al, 2004)

Physical evidence is the environment in which the service is delivered and where the firm and the customer interact, and includes any tangible aspects that facilitate performance of
the service. This physical facility is called servicescape and it encompasses the actual physical facility where the service is performed, delivered, and consumed. Physical evidence is particularly important in the context of credence services.

For organizations delivering high-contact services, the design of the physical environment and the way in which tasks are performed by customer-contact personnel jointly play a vital role in creating a particular corporate identity and shaping the nature of the customer's experience. The service environment and its accompanying atmosphere can impact customer behavior, both during the purchase and post purchase. Since services are intangible, customers often rely on tangible cues, or physical evidence, to evaluate the service before its purchase and to assess their satisfaction with the service during and after consumption.

Consumer Responses To Service Environments

The field of environmental psychology studies how people respond to environments. Services marketing academics have applied the theories from this field to better understand and manage customer responses to service environments. (Lovelock et al, 2004)

Feelings as a Key Driver of Customer Responses to Service Environments - The Mehrabian-Russell Stimulus-Response Model

Exhibit 2-1 below shows a simple yet fundamental model of how people respond to environments. The model, adopted from environmental psychology, holds that the
environment and its conscious and unconscious perception and interpretation influence how people feel in that environment. (Donovan and Rossiter, 1982)

For example, an environment is not avoided simply because there are a lot of people around; rather, one is deterred by the unpleasant feeling of crowding, of people being in the way, of lacking perceived control, and of not being able to get what one wants as quickly as one wishes to. (Lovelock et al, 2004)

Exhibit 2-1: The Mehrabian Russell Stimulus-Response Model

In environmental psychology, the typical outcome variable is approach or avoidance of an environment. In services marketing, one can add a long list of additional outcomes that a firm might want to manage, including how much money people spend while on the firm's premises and how satisfied people are with the service experience after they have left the environment. (Donovan and Rossiter, 1982); (Lovelock et al, 2004)
Relating the above Mehrabian Russell Stimulus-Response Model to remote health care service we see that the service delivered is the same, but the service environment is different as an impersonal channel is used for the delivery of the same core service of health care. The outcome variable in this case is the satisfaction of the patient with the service experience during the service encounter and after he has left the environment.

**How Confirmation or Disconfirmation of Expectations Relate to Satisfaction:**

*Customer Perceptions*

Customers perceive services in terms of the quality of the service and how satisfied they are overall with their experiences. (Zeithaml et al, 2000)

Satisfaction can be defined as an attitude like judgment following a purchase act or a series of consumer product interactions. (Yi, 1990); (Lovelock et al, 2004)

Most studies are based on the theory that the confirmation/disconfirmation of preconsumption expectations is the essential determinant of satisfaction. (Oliver et al, 2001); (Lovelock et al, 2004)

This means customers have certain service standards in mind prior to consumption, observe service performance and compare it to their standards, and then form satisfaction judgments based on this comparison. The resulting judgment is labeled negative disconfirmation if the service is worse than expected, positive disconfirmation if better than expected, and simple confirmation if as expected. (Oliver et al, 1997); (Lovelock et al, 2004)
When there is substantial positive disconfirmation, along with pleasure and an element of surprise, customers are likely to be delighted. (Lovelock et al, 2004)

**Importance of customer satisfaction to service managers**

It has been proved that there are strategic links between the level of customer satisfaction and a firm's overall performance. Researchers from the University of Michigan found that on average, every 1 percent increase in customer satisfaction is associated with 2.37 percent increase in a firm's return on investment (ROI). (Anderson and Mittal, 2000). And Susan Fournier and David Mick state:

"Customer satisfaction is central to the marketing concept ....(I)t is now common to find mission statements designed around the satisfaction notion, marketing plans and incentive programs that target satisfaction as a goal, and consumer communications that trumpet awards for satisfaction achievements in the market place.” (Fournier and Mick, 1999).

(Lovelock et al, 2004)

**Service Quality**

Service quality is a critical component of customer perceptions. In case of pure services, service quality will be the dominant element in customer's evaluations. Researchers argue that the distinctive nature of services requires a distinctive approach to defining and measuring service quality. Since customers are often involved in service production - particularly in people-processing services - a distinction needs to be drawn between the
process of service delivery (what Christian Gronroos calls functional quality) and the actual output of the service (what he calls technical quality). (Gronroos, 1990); (Zeithaml et al, 2000)

Gronroos (Gronroos, 1990) also suggests that the perceived quality of a service is the result of an evaluation process in which customers compare their perceptions of service delivery and its outcome against what they expect.

_Service Quality Dimensions_

Consumers consider five dimensions in their assessment of service quality (Parsuraman et al, 1988); (Zeithaml et al, 2000)

_Reliability:_ Delivering on Promises. Of the five dimensions, reliability has been consistently shown to be the most important determinant of perceptions of service quality (Zeithaml and Mary Jo Bitner, 2000). Reliability is defined as the ability to perform the promised service dependably and accurately.

_Responsiveness:_ Being willing to help. Responsiveness is the willingness of the service provider to help customers and to provide prompt service. Responsiveness is communicated by the length of the time they have to wait for assistance, answers to questions, or attention to problems. Responsiveness also includes the notion of flexibility and ability to customize the service to customer needs.

_Assurance:_ Inspiring Trust and Confidence. Assurance is defined as employees’ knowledge and courtesy and the ability of the firm and its employees to inspire trust and confidence.
This dimension is likely to be particularly important for services that the customer perceives as involving high risk and/or about which they feel uncertain about their ability to evaluate outcomes, for example in medical services.

**Empathy:** Treating Customers as Individuals. Empathy is defined as the caring individualized attention the firm provides its customers. The essence of empathy is conveying, through personalized or customized service, that customers are unique and special. Customers want to feel understood by and important to firms that provide service to them.

**Tangibles:** Representing the service physically Tangibles are defined as the appearance of physical facilities, equipment, personnel, and communication materials. All of these provide physical representation or images of the service that customers, particularly new customers, will use to evaluate quality. (Zeithamal et al, 2000)

**Satisfaction versus Quality**

Consensus is growing that the two concepts are fundamentally different in terms of their underlying causes and outcomes. (Parasuraman et al, 1994); (Oliver, 1994) While they have certain things in common, satisfaction is generally viewed as a broader concept while service quality assessment focuses specifically on dimensions of service. Based on this view, perceived service quality is a component of customer satisfaction. (Zeithamal et al, 2000)

Service quality is a focused evaluation that reflects the customer’s perception of specific dimensions of service: reliability, responsiveness, assurance, empathy and tangibles.
Satisfaction on the other hand, is more inclusive: It is influenced by perceptions of service quality, product quality and price as well as situational factors and personal factors.

**Customer Satisfaction**

*What is customer satisfaction?*

According to Richard L. Oliver, Satisfaction is the consumer’s fulfillment response. It is a judgment that a product or service feature, or the product or service itself, provides a pleasurable level of consumption–related fulfillment. (Oliver et al, 2001); (Zeithamal et al, 2000)

Customer satisfaction will be influenced by specific product or service features and by perception of quality. Satisfaction will also be influenced by customer’s emotional responses, their attributions and their perceptions of equity. (Zeithamal et al, 2000)

➢ *Product or service features*

Customer satisfaction with a product or service is influenced significantly by the customer’s evaluation of product or service features. (Oliver et al, 1997)

Hence in conducting satisfaction studies like this one, the important features and attributes for the service are determined through field study and interviews. Then the perception of these features as well as overall service satisfaction are measured.

➢ *Consumer Emotions*

Customer’s emotions can also affect their perceptions of satisfaction with products and services. (Price et al, 1995) Specific emotions may also be induced by the
consumption experience itself, influencing a consumer’s satisfaction with the service.

> Perceptions of Equity or Fairness

Customers’ satisfaction is also influenced by perceptions of equity and fairness. (Clemmer et al, 1996); (Zeithamal et al, 2000)

**Health care service**

**Customer in Health care service**

“In health care services given by the doctor, the customer is the patient. He is a different type of customer, from the customer of other services in many ways. Health care service is a high involvement service in which the patient is directly involved in the provider client interaction where the service is produced and simultaneously consumed by the patient. However due to lack of technical knowledge the patient does not know what he is getting from the doctor even after experiencing the service. As such a patient is somewhat different from other customers who consume other types of services in view of the credence qualities of health care services.”(Zeithmal et al, 1996); (Salgaonkar, 2006)

“The behavior of a patient as a consumer of health care services is determined by various unavoidable factors like the physical condition of the patient, the illness involved and the seriousness of the case etc. Most often, the need for availing health care services from a provider i.e. doctor, becomes immediate and unavoidable as it may involve the question of life or death of the patient, whereas in case of a consumer of other services, the decision of consumption may be avoided or postponed for a future date depending upon the wishes of
the individual. Such a possibility does not exist in health care sector as usually the avoidance or postponement of consumption decision will lead to very serious implications for the health of the patient, either resulting in death or seriously debilitated health” (Salgaonkar, 2006).

“A patient is a consumer of such services where he has no choice of the type and quality of treatment given. He has no choice as regards the diagnosis, the various tests, scans etc. to be carried out. Also there is no choice about the medicine prescribed. Moreover a patient, unless he happens to be from the medical/paramedical field, does not posses sufficient knowledge about the disease and the treatment and has to depend fully on the doctor for his well-being. A patient is in the hands and control of the doctor as is a child in the mother’s. To use the term coined by Anderson and Manning (1990) a patient may be called a “Vulnerable Consumer”. They define vulnerable consumers as “those who are at a disadvantage in exchange relationship where that disadvantage is attributable to characteristics that are largely not controllable by them at the time of transaction”. (Anderson and Manning, 1990); (Salgaonkar, 2006)

“In the course of health care service delivery, many a times the doctor lacks human warmth, concentration being more on medical treatment. The concept of “patient” and “illness” to the doctor are contrary to that of the patient himself. To the doctor, illness is a disease process that can be measured and understood through laboratory tests and clinical observations (Toombs, 1992), whereas to the patient, illness is a disrupted life (Korsch and Harding, 1998). The doctor’s focus is more on keeping pace with the rapid advances in medical science than on trying to understand the patient’s feelings and
concerns. They do not see the role of doctor as listener, but instead view their function more as a human 'car mechanic': find it and fix it (Rotter & Hall, 1992). Such behavior on the part of the doctor may make the patient psychologically irritated and more sick and unhappy with the whole experience. These aspects are more relevant in health care services in view of the high personal involvement (physical and mental) of the patient in the service encounter" (Salgaonkar, 2006).

"Moreover there are varied situations and conditions that a patient may encounter in health care service. Similarly there are various specialties of the doctors available ranging from general practitioners to the super specialists. Likewise a patient may seek medical advice and treatment in varied situations, like in routine ailments, in emergency situations, in treatment of chronic ailments, life-threatening ailments etc" (Salgaonkar, 2006).

"All these aspects clearly suggest that the healthcare service is different from the other types of services and the patient, who is the customer of health care services, is a different type of customer from customers of other types of services" (Salgaonkar, 2006).

**Credence Qualities of Healthcare Service**

"The health care service is a high involvement and credence type service (Zeithaml et al, 1996). Moreover, due to the absence of the tangibility of the service, one cannot make a thorough evaluation of the service received; and since such an evaluation often seems desirable, customers would tend to evaluate what they can sense (Gronroos, 1978)."
That is surrogates or “cues’ are used to help them determine the provider’s capability” (Shostack, 1977). (Salgaonkar, 2006)

“Health care is a complex service involving a doctor dealing with the very “person” of the patient. A patient, unlike a customer of other services, does not know what he should get and what he is getting from the doctor even after experiencing the service (credence qualities). He does not have the technical ability to judge what exactly he is receiving from the doctor, and as such relies heavily upon other cues, such as aspects of the interaction, and the process dimension of the service delivery to evaluate and form his opinion about the service (Parasuraman et al, 1985). The service encounters between the doctor and the patient thus become very important in the evaluation of the health care service”. (Salgaonkar, 2006)

**Patient Satisfaction**

Health care is now entering an age of “accountable consumerism” in which patients demand service excellence (Vinn, 2000). To meet the expectations of their patients, clinicians will need to continually improve quality and increase patient satisfaction. Issues that are important to patients, aspects that influence patients’ satisfaction and decisions to return and their perceptions of quality, have to be identified to focus on improvement. (Drain et al, 2001). Increasingly, the measure of patient satisfaction is viewed as important in outcomes research and quality improvement efforts. (Ganey & Drain, 1998); (Pichert et al, 1998); (Press, 1993); (Press, Ganey,&Malone, 1992).
In addition to increased patient compliance and health outcomes, patient satisfaction has been linked to greater service utilization and risk management (Burroughs et al, 1999). As a result, managed care organizations are placing greater emphasis on patient-perceived outcomes measures, such as satisfaction and functional status (Kaldenberg & Malone, 1997).

Dissatisfied patients are less likely to return to a provider or to seek treatment at all; so patient dissatisfaction can have a devastating effect on a health care provider’s retention efforts (Bendall & Powers, 1995).

In a study by Rubin et al., (1993), patient satisfaction levels clearly predicted patients’ switching behavior. (Rubin et al, 1993)

Patient satisfaction can be considered with the framework of Donabedian's (1988) three markers of health care quality: structure (e.g. hospital resources and facilities), process (e.g. longer and more informative medical consultations) and outcomes of care (e.g. higher levels of patient adherence to health recommendations and higher levels of health and well-being). (Donabedian, 1988); (McCarthy et al, 2000)

All the studies conducted on patient satisfaction are in face-to-face encounters, whereas this research aims to study patient satisfaction in remote service encounters.
**Justification for Research**

Patient satisfaction with healthcare has received a great deal of research attention over the past two decades. This proliferation of research can be attributed to the associations that have been found between levels of patient satisfaction and a number of outcome variables. In fact, it has been repeatedly demonstrated that patients who rate themselves as more satisfied tend to be more compliant with treatment recommendations, (Aharony et al, 1993); (Ley, 1982); (Ley, 1988); (Sherbourne et al, 1992); (Winefield et al, 1995), are more apt to return to their provider for future treatment, (Aharony et al, 1993); (Roghman et al, 1979); (Zastowny et al, 1989), and are less likely to file malpractice suits. (Hickson et al, 1994); (Levinson et al, 1997); (Hailey et al, 2000)

Given these rather consistent research findings, one may wonder why patient satisfaction should be further examined. To address this question, it should be noted that patients exhibit certain unique characteristics that may make it difficult, and perhaps erroneous, to assume that previous findings apply to this population in the absence of any research evidence.

A problem arises when customers are asked to evaluate services that are high in credence characteristics, such as medical diagnosis of complex cases, which customers find difficult to evaluate even after delivery is completed. A natural tendency in such situations is for clients or patients to use process factors and tangible cues as proxies to evaluate the service. Process factors include customers' feelings about the providers' personal style and satisfaction levels with those supplementary elements that they are competent to evaluate.
As a result, customers' perceptions of core service may be strongly influenced by their evaluation of process attributes and tangible elements of the service – a halo effect. (Wirtz, 2003)

Although research in the health care area has been conducted in a variety of medical settings, including family practice clinics, hospitals, and oncology wards, this is the very first attempt to conduct research in remote health care centres where the core service of health care is delivered through an impersonal channel of service delivery.

**Research Issues**

In situations, where the service is a high involvement and high complexity service, the customer requires handholding, reassurance, from the service provider.

Social and interpersonal bonds are developed between consumer and provider, in face-to-face service delivery, which is not possible in remote service delivery as the provider is oblivious to the personal details of the customer, his occupation, his family etc.

Hence out of the five Service Quality dimensions developed by A Parasuraman, *assurance* and *empathy* take a back seat in a remote service encounter.

*Assurance* is about inspiring trust and confidence. Assurance is defined as employees' knowledge and courtesy and the ability of the firm and its employees to inspire trust and confidence. This dimension is likely to be particularly important
for services that the customer perceives as involving high risk and/or about which they feel uncertain about their ability to evaluate outcomes, for example in medical services.

In remote service encounters, as there is no face-to-face contact between consumer and provider, it is difficult for the provider to inspire trust and confidence, especially when the customer perceives the service as high risk service, due to the high complexity of the service and due to the high involvement of the customer.

*Empathy:* Treating Customers as Individuals. Empathy is defined as the caring individualized attention the firm provides its customers. The essence of empathy is conveying, through personalized or customized service, that customers are unique and special. Customers want to feel understood by and important to firms that provide service to them.

In non face-to-face situations, it is difficult to give individualized personal attention to the customers, as the core service provider is not physically present in the service factory.

Hence, we see that channel of service delivery is important for customer satisfaction when the service is a high involvement high complexity service.
Research Objectives

[I] To research the impact of channel on customer satisfaction in high involvement high complexity situations when the service is delivered through impersonal channels.

[II] To research the impact of channel on customer satisfaction in high involvement high complexity situations when the service is delivered directly.

For objective [I] Telemedicine health care center offers a conducive environment to undertake the research study.

For objective [II] a traditional face-to-face health care setting would provide this environment.

How channel impacts customer satisfaction in high involvement high complexity situations in non face-to-face encounters is not yet researched since these services have been recently introduced in India where this research study is based. There is no research done on the impact of channel on patient satisfaction in health care services.

It is thus very clear that there is a gap in the existing literature as far as the above are concerned, and as such, a study in this direction is essential.

Understanding effect of complexity (in this case disease complexity as perceived by the patient) on customer satisfaction (in this case patient satisfaction) when the core service (i.e. health care which is a high involvement service) is provided through an impersonal
channel of service delivery will be very useful to providers (i.e. doctors) and customers (i.e. patients) in remote health care settings.

Hence the outcome of this research will contribute to the existing body of knowledge on customer satisfaction in high involvement high complexity services.
Conceptual Framework

Thus given the high involvement and complexity scenario in healthcare service as discussed above, one can conceptualize the following grid.

Consider a 2-dimensional grid. On one dimension there is degree of consumer involvement with a service. On the other dimension there is degree of complexity of the service (as perceived by the consumer). Exhibit 2-2: Involvement-Complexity grid

Exhibit 2-2: Involvement-Complexity grid

- 3rd Quadrant
  - Low Involvement
  - Low Complexity

- 4th Quadrant
  - Low Involvement
  - High Complexity

- 2nd Quadrant
  - High Involvement
  - Low Complexity

- 1st Quadrant
  - High Involvement
  - High Complexity
Hence the two dimensional grid will have four quadrants:

1. First Quadrant - High Involvement and High Complexity

This quadrant includes services like health care, which are high involvement services, and this will be where most high complexity disease treatments will belong.

2. Second Quadrant - High Involvement and Low Complexity

This quadrant includes again services like health care, which are high involvement services, and this is where most low complexity disease treatments will belong.

3. Third Quadrant - Low Involvement and low Complexity

Services like ironing of clothes, watering of plants, that are low involvement and simple will belong in the third quadrant.

4. Fourth Quadrant - Low Involvement and High Complexity

Services like maintenance of computer systems, servicing of automobiles which are low involvement but highly complex, belong in the fourth quadrant.

This study deals with only the two high involvement quadrants, as healthcare is a high involvement and credence type service. (Zeithaml et al, 1996) Health care is a complex service involving a doctor dealing with the very "person" of the patient. (Parasuraman et al, 1985).
Existing literature does not discuss or reveal any aspects of the above grid of which 2 quadrants (1st and 2nd Quadrant) are of significance to the study, which is being undertaken. Since the area (1st and 2nd Quadrant) has not been researched, there exists, a possibility of theoretical contribution to the literature in services.

Existing literature does not say anything about customer satisfaction and the factors that are related to it causatively in each of these quadrants. As there is no mention of such a classification, there is a research gap. The researcher intends to fill this gap in literature by researching the impact of channel on customer satisfaction in the high involvement high complexity situations when a] the service is delivered through impersonal channels and there is no face-to-face contact between provider and consumer & b] the service is delivered directly when there is face-to-face contact between provider and consumer.

The hypotheses and methodology to explore the above are outlined in the following chapter.