

## MARKETING THEORY AND ITS APPLICATIONS IN THE HEALTHCARE INDUSTRY

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### **ABSTRACT**

This paper deals with Services Marketing principles with special reference to the healthcare industry. The focus is on the impact of technology on healthcare marketing as observed in some corporate specialty hospitals in the South.

The three key players in this field are: Company (Management and administrators), customers (patients and their attendants) and service providers (physicians, surgeons). They occupy the vertices of the Services Triangle. Between these three points, three types of marketing must be efficiently carried out for the service to succeed. These are: external marketing, interactive marketing, and internal marketing. These marketing activities are widely assisted by technological innovations such as Information Technology (IT) Systems, telecom devices, electronic and biomedical equipment.

A whole gamut of activities including registration and admission of patients, allotment of rooms to inpatients, fixing appointments with doctors and consultants are covered by Information Technology. In addition, maintenance of records, billing and other administrative tasks come within the purview of IT systems.

Parasuraman, Zeithaml and Berry formulated a Service Quality model that highlights the main requirements for delivering high service quality. According to this, there is a gap between expected and perceived service. It relates to management's understanding of consumer expectations, translating perceptions into service specifications, service delivery, and external communication to customers. GAP 1 is customer expectation minus company understanding.

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GAP2 is company understanding minus setting standards (service specifications). GAP3 is standards set minus delivery. GAP4 is delivery minus external communication. The overall gap is the sum of all these, the Gap between Expectation and Perceived Service Delivery.

Based on the Service Quality model, Parasuraman et al, identified the following five determinants of service quality: Reliability, Responsiveness, Assurance, Empathy and Tangibles. Reliability is the ability to perform the promised service dependably and accurately. Responsiveness is the willingness to help customer and provide prompt service. Assurance covers employees' knowledge and courtesy, and also their ability to inspire trust and confidence. Empathy includes caring and individual attention given to customers. Tangibles refer to appearance of physical facilities, equipment, personnel, and written materials.

The Institute of Cardiovascular Diseases in the Madras Medical Mission has specialized in by-pass heart surgery and is attracting patients from all over the world. One notable feature here is that risk factors have been reduced owing to modern technological devices and attention of experts, thereby enhancing reliability. In other corporate hospitals also, computerized prescriptions have almost become routine and these serve to avoid errors in administering drugs with proper dosage.

Trauma cases and emergency medical care must be given immediate attention and for this hospitals must be prepared all the 24 hours. Delivery cases (maternity and labour cases) stand in the same footing. In all such instances, willingness of concerned doctors and hospital staff (responsiveness) to help patients and provide prompt treatment is of the utmost importance.

Similarly, assurance indicates another parameter that goes to satisfy the patients (the customers) who are seriously ill. Nowadays, chemotherapy and radiotherapy have become accepted and trusted methods of treating the killer disease, cancer. The Cancer Research Institute (CRI) in Adyar, Chennai, has extended an assurance to patients that 'cancer is curable'. The crowds of people which throng the CRI stand testimony to this.

Empathy is something instinctively felt by customers, patients in hospitals. People who prefer individual attention go to neighbourhood hospitals which are not too crowded.

Servicescapes form an essential component of tangibles. These include air-conditioned ambience (dust and noise free) pleasing interior design, good canteen facilities etc. An expanded marketing mix for services has been suggested by service marketers. This consists

of people, physical evidence, and process apart from the traditional four P's (Product, Price, Place and Promotion)

Modern high tech equipments have helped in bridging the gaps between management, service providers and customers thereby enhancing service quality and improving customer satisfaction and loyalty.

## INTRODUCTION

While intangibility and heterogeneity make services stand apart from goods, services marketing has a number of special attributes. The objective of this paper is to bring out some of these with special reference to the healthcare industry. The focus is on the impact of technology on healthcare marketing as observed in some corporate specialty hospitals in the South.

## SERVICES TRIANGLE

The three key players in this field are: Company (management and administrators), customers (patients and their attendants) and service providers (physicians, surgeons). They occupy the vertices of the Services Triangle. (Fig 1) Between these three points, three types of marketing must be efficiently carried out for the service to succeed. These are: external marketing, interactive marketing and internal marketing.

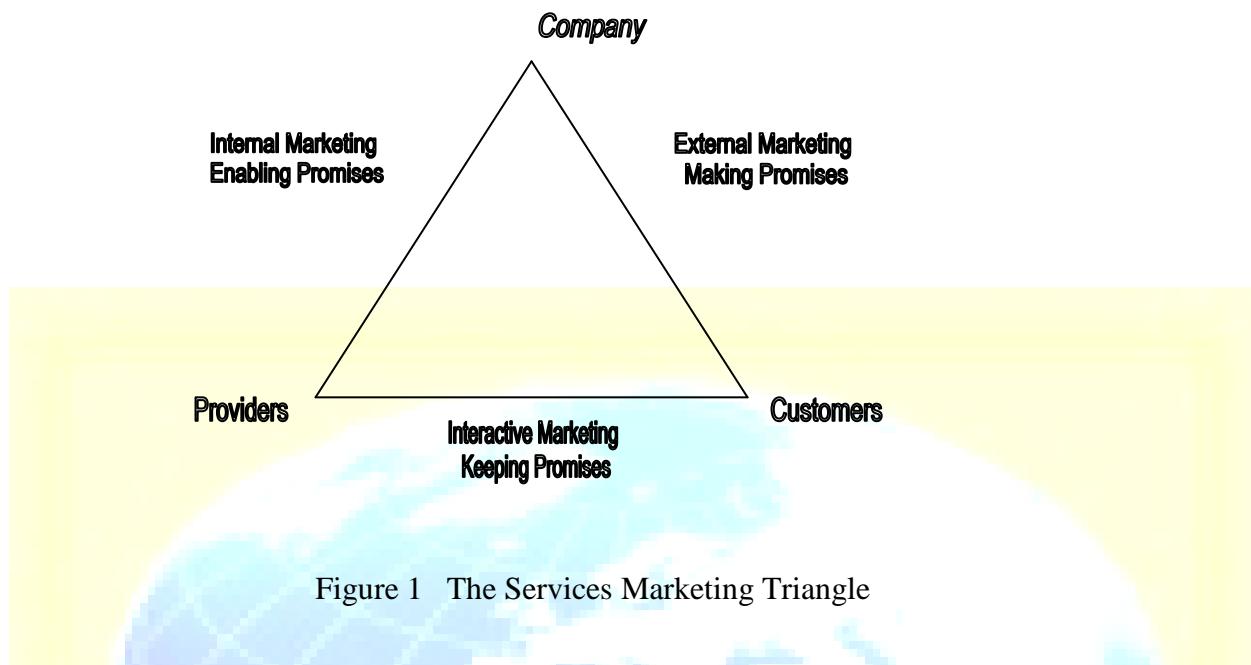


Figure 1 The Services Marketing Triangle

An organization makes promises to its clients through its external marketing efforts. Traditional marketing activities including advertising, sales, special promotions and pricing facilitate this process. In the case of services, the design and décor of the facility (hospital premises), service employees (medical and non-medical staff), and service processes help in raising customer expectations.

Enabling of promises constitutes internal marketing. If employees and service systems are to deliver on the promises made, they must have the skills, abilities, tools and motivation to deliver. Hence, they must be enabled. "Promises are easy to make but unless employees are recruited, trained, provided with tools and appropriate internal system and rewarded for good service, the promise may not be kept." (Mary Jo Bitner, 1995)

The most critical from the customers' point of view is keeping promises. This is interactive marketing. It is marketing that occurs in the moment of truth when the customer interacts with the organization and the service is produced and consumed. Promises are kept or broken and service reliability is tested every time the customer interacts with the organization.

Technology has come to occupy a pivotal role in services and service delivery. As a consequence, the Services Triangle has been expanded to provide for technology and thus the Triangle is turned into a pyramid. (Fig. 2)

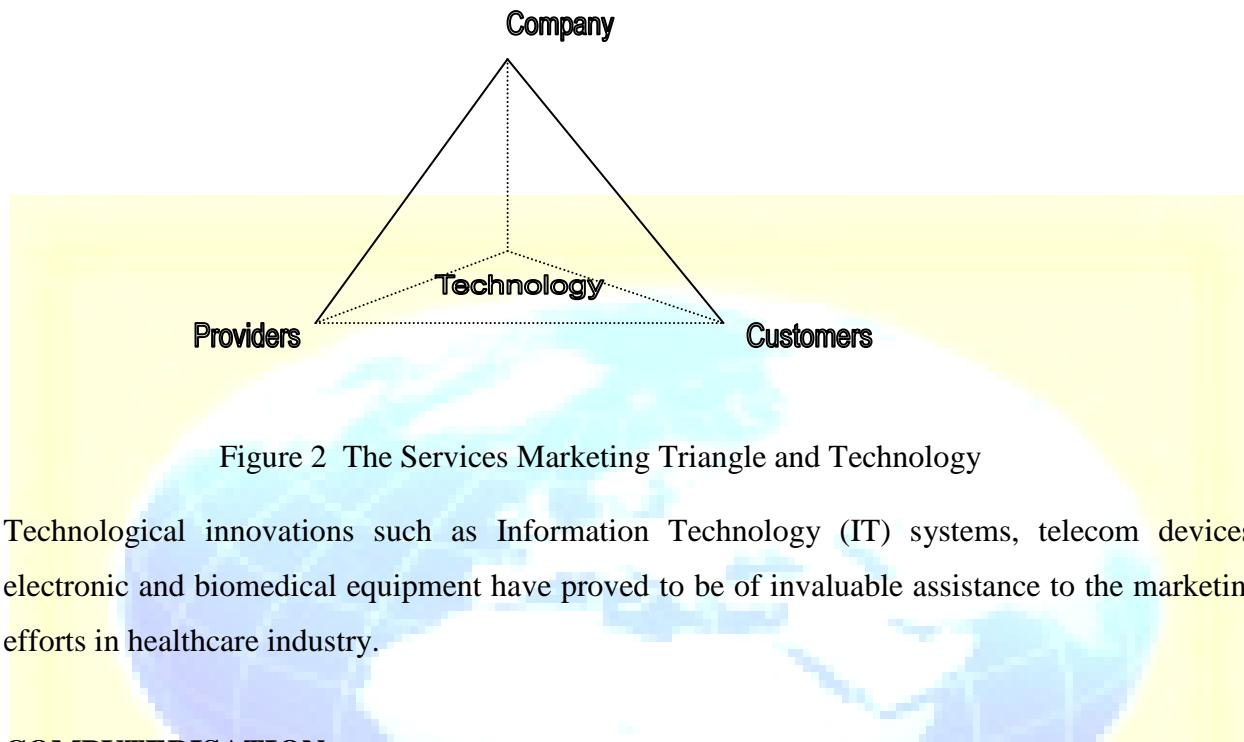


Figure 2 The Services Marketing Triangle and Technology

Technological innovations such as Information Technology (IT) systems, telecom devices, electronic and biomedical equipment have proved to be of invaluable assistance to the marketing efforts in healthcare industry.

### COMPUTERISATION

A whole gamut of activities including registration and admission of patients, allotment of rooms to inpatients, fixing appointments with doctors and consultants are covered by Information Technology. In addition, maintenance of records, billing and other administrative tasks come within the purview of computers.

According to Atul A. Gawande and David W. Bates, two reputed medical professionals, “safe medical care is becoming unimaginable without computerized decision support. Even today more than 600 drugs require adjustment of doses for multiple levels of renal dysfunction, a task that is poorly performed by human prescribers without assistance but can be done accurately by computers.” Maintenance of medical records and retrieving them when necessary has now become easier with the application of I.T. This is imperative for chronically ill patients.

### WEB TECHNOLOGY RELATED DEVICES

Internet and networking of computers facilitate the transfer of information from one computer to another. Internet powered customer service for a healthcare organization is vital for

success, but simply putting a few brochures on the internet misses the main advantage of using the web. The web is unlike any of the traditional communication vehicles used in the past, in the opinion of marketing and public relations experts. In one multimedia package, the web combines "the depth of print, the flashiness of broadcast, and the segmentation of direct advertising." The anonymity of the internet is a major attraction for many people, according to Kevin P. Richardson. They ask questions which they otherwise may not ask. Many websites have online question and answer sessions conducted by specialists and interactive chat programmes to serve the customers in a way that was not possible prior to the web era.

Marketing professionals in healthcare industry are nowadays using different techniques to draw consumers into their sites to search for information or respond to specific offers like finding a physician or signing up for a health screening. Once the consumers are online, they convert those browsers into prospects by capturing personal information in a customer database and getting them to sign up for interactive health news and medical reminders.

### **ELECTRIC AND ELECTRONIC GADGETS**

These include air conditioners, elevators or lifts, colour television sets, music systems, refrigerators, water coolers and heaters etc. which go to improve the physical facilities or servicescapes in hospitals. Many modern hospitals function in high rise, multistoreyed buildings. Lifts or elevators enable not only safe and rapid movement of doctors, patients and their attendants but also quick transport of critically ill people to the operation theatre.

### **TELECOM DEVICES, MOBILE PHONES etc.**

Intercom and mobile phones in hospitals play a crucial role in bringing together physicians, surgeons, anesthetists, nurses and paramedical staff to tackle any emergency. Administrators use mobile phones to contact experts who are always on the move.

### **BIOMEDICAL EQUIPMENT**

These include diagnostic devices such as equipment for taking X-ray, CT scan, ultrasound scan etc., and also equipment to aid surgical procedures like endoscope, laparoscope, laser devices etc. In addition, instruments used in intensive care units like ventilator, heart beat,

pulse rate and pressure monitor play a vital role in the treatment and care of patients. Hospitals advertise the latest equipment they acquire in a bid to lure patients.

### **INTEGRATED HEALTHCARE AND TELEMEDICINE**

The advent of telemedicine has brought a sea change in the field of diagnostics and treatment. TIME Magazine referred to telemedicine as “healing by wire” and what Arthur Clarke, eminent science writer, prophesized (“Men will cease to commute, they will communicate”) has come true. Thanks to this development, consultation with expert physicians and surgeons who examine the scan images of patients living thousands of miles away has been made possible. Telemedicine enables the delivery of healthcare and exchange of information about it across vast distances by utilizing telecommunication technology.

It makes possible the transfer of basic patient information over computer networks (medical informatics), the transfer of images like radiographs, computer tomography (CT) scans, magnetic resonance imaging(MRI) pictures, ultrasound studies, and pathology reports. In addition, transfer of video images of endoscopic or other procedures, patient interviews and examinations, consultations with medical specialists are carried out in telemedicine.

### **GAPS MODEL**

Parasuraman, Zeithaml and Berry formulated a Service Quality model that highlights the main requirements for delivering high service quality. According to this, there is a gap between expected and perceived service.



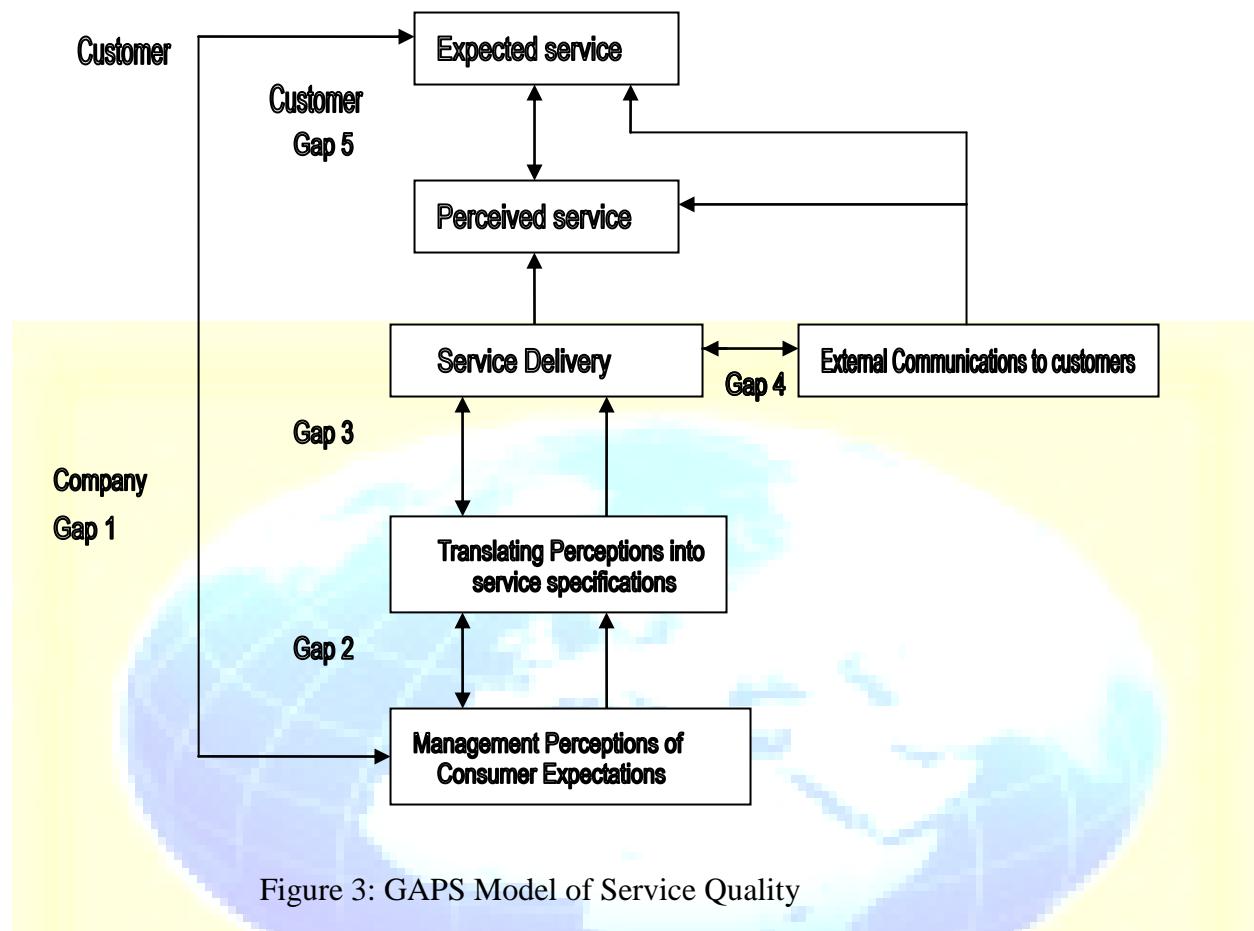


Figure 3: GAPS Model of Service Quality

It relates to management's understanding of consumer expectations, translating perceptions into service specifications, service delivery, and external communication to customers. GAP 1 is consumer expectation minus company understanding. GAP 2 is company understanding minus setting standards (Service specifications) GAP 3 is standards set minus delivery. GAP 4 is delivery minus external communication, The overall gap is the sum of all these, the gap between expectation and perceived service delivery.

Hospital management tries to understand the expectations of customers (patients) through market research, complaint facilitation, critical incidence studies, and SERVEQUAL surveys. The deficiency that might occur here can be overcome by online research and getting regular feedback from the patients who are discharged from the hospital.

The management conveys customer driven service standards to service personnel by drawing a blue print of the processes to be adopted from registration, admission through treatment

and discharge. Equipping the hospital with necessary diagnostic and surgical tools, the latest innovations and servicescapes becomes vital. Effective design of physical, tangible evidence is important for closing the provider gap (GAP2).

The general elements of physical evidence are: exterior facilities like design, signage, parking, landscape and surrounding environment. Interior servicescapes include interior design, seating in the lobby, layout, air quality and temperature, lighting (illumination) etc.

The service providers (doctors) render service to the best of their ability with the help of nurses, other assistants (ward boys etc.) and the co-operation of patients and their attendants. Even then, it is very difficult to satisfy the customers as the service is intangible, and expectations of patients are varied. Unless the outcome is really favourable, the work of doctors and nurses is not likely to be appreciated. Again, the cost of medical treatment and insurance facilities available play a role in this scenario. Whatever the service personnel do, a gap arises between the physician and the patient if there is no proper communication between them.

Communication effectiveness refers to formal as well as informal sharing of meaningful and timely information. Examining the impact of communication effectiveness on technical quality, functional quality and trust on relationship commitment in the context of a professional service, Neeru Sharma and Patterson came to the conclusion that communication effectiveness is the single most determinant of relationship commitment.

## DIMENSIONS OF SERVICE QUALITY (SERVQUAL)

Based on the Service Quality model, Parasuramn et al, identified the following five determinants of service quality: Reliability, Responsiveness, Assurance, Empathy and Tangibles. Reliability is the ability to perform the promised service dependably and accurately. Responsiveness is the willingness to help the customer and provide prompt service. Assurance covers employees' knowledge and courtesy, and also their ability to inspire trust and confidence. Empathy includes caring and individual attention given to customers. Tangibles refer to appearance of physical facilities, equipment, personnel and written materials.

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## **ACCREDITATION**

Another area of interest to the marketers as much as to medical practitioners is accreditation. The National Accreditation Board for Testing and Calibration Laboratories (NABL), New Delhi, has been actively engaged in evaluating the work of the in-house testing laboratories in hospitals, all over India. The Sundaram Medical Foundation Dr. Rangarajan Memorial Hospital, Chennai and the Madras Medical Mission, to cite tow examples, are already accredited by NABL. Many hospitals in the country have started referring to accreditation in their promotional brochures and publications. In a situation where the patients (consumers) are becoming quality conscious, this type of information helps in attracting them.

All over the world, Information Technology has revolutionized the healthcare industry, and the marketing of services and products in the domain. Aneesh Chopra became the U.S. Government's first Chief Technology Officer when President Barrack Obama confirmed him in the post in May 2009. He began as a startup that went public in the healthcare domain but with an increasing stress on technology. The Economic Recovery Act (signed in February 2009) in the U.S. stipulates that doctors who want to use IT incentive programmed must provide their patients

with an electronic copy of their medical records within 48 hours of a request, thus giving "the freedom and the tools to manage your own health information". Again, new ideas come up to "bend the healthcare cost curve, improve quality and increase customer satisfaction". A nationwide health information network is also in place in order to "safely and securely transmit healthcare data by using social network in the context of Web 2.0 capabilities, wikis and so forth", according to an article in SPAN Magazine (July/August 2010)

### **EXPANDED MARKETING MIX**

An expanded marketing mix for services has been suggested by service marketers. This consists of people, physical evidence, and process apart from the traditional four P's (Product, Price, Place and Promotion)

### **KRUSAL-WALLIS 1 WAY ANOVA**

In one analysis (using Kruskal-Wallis 1 way ANOVA) to get a comparative picture of the opinions of hospital administrators, physicians, and patients regarding the impact of high tech equipments and dimensions of marketing mix, the author of this paper arrived at the following conclusions:

1. Administrators assigned considerable importance to high tech equipments which help in marketing activities.
2. Doctors give the top rank to the WEB or Internet in the matter of improving service quality and accessibility.
3. Patients appreciate service quality and the role of biomedical equipments in enhancing service quality and satisfaction.

### **CONCLUSION**

Modern high tech equipments play a positive role in relationship marketing (external, internal, and interactive) in healthcare industry. They have helped in bridging the gaps between management, service providers, and customers' thereby enhancing service quality and improving customer satisfaction and loyalty.

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