CHAPTER VI<sup>th</sup>

SUMMARY, FINDINGS & SUGGESTIONS

PROLOGUE:
Under this chapter the researcher will discuss:
Summary, findings, & suggestions.

6.1. SUMMARY

Services are said to have four key characteristics which impact on marketing programs. These are:

- Intangibility
- Inseparability
- Heterogeneity/variability
- Perishability (simultaneous production/consumption)

It is helpful to consider each of these characteristics briefly:

Services are said to be **intangible** – they cannot be seen or tasted. This can cause lack of confidence on the part of the consumer. As was apparent earlier, in considering pricing and service marketing.

The waitress in a restaurant, or the cashier in the bank, is an **inseparable** part of the service offering. The client also participates to some extent in the service.

This can give rise to concern about service quality and uniformity issues. Personnel training and careful monitoring of customer satisfaction and feedback can help to maintain high standards.

Services are perishable; they cannot be stored. Therefore an empty seat on a plane, for example, is a lost opportunity forever.

There are essentially two ways of looking at the function of marketing. One way is to down the tasks, which are involved in the marketing process, and to identify them individually. Marketing is not something to be done just by the marketing department. The tasks involved in marketing include the following:

- In developing a marketing strategy, there are essentially two tasks:
  - The selection of target markets
  - The formulation of an appropriate marketing mix to serve those target markets.

As per the revised tariff, a local call made from a PCO booth to a fixed line phone will cost Rs. 1.20 for a 90 second call. Until now, a two-minute call cost Rs.2.
So, if one were to make a two-minute call now, it would cost 20 percent more at Rs.2.40.

New technologies, globalisation, privatisation and deregulation can be seen as a challenge to postal services but also offer opportunities to postal operators who use them to their advantage.

The Reliance network, when operational, will enable customers to catch their favorite TV programs, make local & long distance telephone calls and use the internet via fiber-optic cables.

Telecommunications is one of the foremost infrastructures, which heralds the growth of GDP of a country. It is one the very few infrastructures, which has seen so many evolutions of new technologies that are serving mankind today.

Latest technology development in the field of telecommunication helps in -

GENERATING FOREIGN DIRECT INVESTMENT, RISING OF INTERNET PENETRATION, IMPROVING STANDARD OF LIVING, IMPROVE EMPLOYMENT OPPORTUNITIES, EXPAND PRODUCTIVITY, OFFER OPPORTUNITIES FOR THE SMALL SCALE SECTOR, HELPFUL IN BUSINESS.

On October 1, 2000 the Department of Telecom Operations, Government of India became a corporation and was christened Bharat Sanchar Nigam Limited (BSNL). Today, BSNL is the No. 1 Telecommunications Company and the largest Public Sector Undertaking of India with authorized share capital of $ 3977 million and networth of $ 14.32 billion. It has a network of over 45 million lines covering 5000 towns with over 35 million telephone connections.

Reliance Infocomm (RIC) is India's largest mobile service provider with over 10 million customers. Reliance Infocomm has established a pan-India, high capacity, integrated (wireless and wireline) and convergent (voice, data and video) digital network, to offer services spanning the entire Infocomm value chain -infrastructure, services for enterprises and individuals, applications and consulting. Reliance Infocomm has licenses to offer telecom services in 20 circles under the Unified Access license. In addition, it has received the Letter of Intent for the J&K circle. This has enabled RIC to offer services across the length and breadth of India's vast geography through its next generation fiber optic network backbone spanning 60,000 route kms. RIC is currently offering its wireless services in 1,100 towns and cities across India.

Research is a part and parcel of any systematic knowledge. It has occupied the realm of human understanding in some form or the other from time immemorial. The human urge for new areas of knowledge has developed a faculty for search and researches in him.

Research is the process of systematic and in depth study or search for any particular topic, subject or area of investigation, backed by the collection, compilation, presentation and interpretation of relevant details of data. Any social or economic research may have two objectives academic objectives and utilisation objectives.
This kind of research finds favour with almost all the social science researchers as it is one of the most popular methods of investigation, because a study of the attributes and variables in relation to the population (the entire group of people, inhabitants, items, etc. under study) is easier, and is more accurate it suffers from a negligible magnitude of error.

The research design of the present study is mainly exploratory. However, it may be referred to as a mixed design containing designs of empirical studies, analytical studies and survey studies.

Involves checking or logging the data in; checking the data for accuracy; entering the data into the computer; transforming the data; and developing and documenting a database structure that integrates the various measures.

In any research project you may have data coming from a number of different sources at different times:

- Mail surveys returns
- Coded interview data

As soon as data is received you should screen it for accuracy. In some circumstances doing this right away will allow you to go back to the sample to clarify any problems or errors.

- Are the responses legible/readable?
- Are all-important questions answered?
- Are the responses complete?

This study was conducted through visits and personal Interviews of various categories of employees in Reliance Infocomm Ltd. Data was made available by the personal interaction and personal Interviews.

The research results in theory and theoretical treatment is a part of any research and analysis. There are many variables, which are important from the point of view of theoretical treatment. But these variables may not be of much practical use in management decision-making process, though many relevant aspects are covered by the research.

Hypothesis is pre-supposition or an assumption, which a researcher takes into account. Thus, a hypothesis is skeptical, though it is based on an observation, until it is tested. It can take the shape of a proposition, which may involve assumption in the given situations on context.

The product life cycle is frequently illustrated as being comprised of four stages:

- Launch, or introduction
- Growth
- Maturity
- Decline
The product life cycle is typically represented graphically in terms of sales over time.

The new product development process, as carried out by manufacturing companies, has been the focus of a significant amount of marketing literature for many years. The main reason for this is that it is both essential for long-term success, and a very costly, high-risk process.

The New Service Development Process is a systematic, staged process, which organisations should adopt to screen new service ideas and maximize their chances of success in the market.

Product mix consists of various product Lines. Either introducing can change the product line or deleting the product can change the product line. It depends on the following factors:

(i) The Preferences of consumers.
(ii) The Strategies of competitors.
(iii) The Cost structure of the firm
(iv) The Divert of demand from one product to another.

BSNL existing Tarang for capturing the market and making product more preferable among consumer. It provides many services like, Excel & Cellone, Internet.

Reliance IndiaMobile service through a nationwide wireless network that will reach out to 90% of India's population and eventually to every Indian. Netway revolution by providing 100 mbps Ethernet links to every desktop and device to half a million enterprise buildings initially and eventually to 10 million buildings.

Third, in end 2003, with a consumer convergence revolution by providing high speed Ethernet links to 80 million homes initially and eventually to every home.

The challenged before the marketer of telecommunication service that the customers should stick to its offers & products because the larger one stage with a product or an offer it became highly unlikely for him to move to the competition as the exits light if we look at the customers relations of BSNL and Reliance.

Availability of services on time at place that is convened is important when one compares BSNL & Reliance on this parameter one finds out that BSNL is not taking due care in ensuring that the product/service reach the customers in time.

Technical issues surrounding services in, an industry like telecommunication can make or marks an organisation prospects.

Market demand is the demand for a given product that consumers will purchase at time. Demand can be measured in physical or monetary terms.

We will take the market demand an the P3 like

P1-> It is related to the population factor
P2-> stands for purchasing power purchasing power is customer's ability to pay
P3-> stands for purchasing patterns or buying behavior.
The number of mobile subscriber has raised more than 13-fold to more than 4.5bn in 2000 and the number of landlines has risen by 63 percent to 49m. All these have become possible due to launching or introduction of various plans & schemes & value-added-services.

Sometimes the consumer is highly involved in a purchase but sees little difference in brands. The high involvement is based on the fact that the purchase is expensive, infrequent, and risky. In this case, the buyer will shop around to learn what is available if the consumer finds quality difference in the brands, he or she might go for the higher price.

After studying the buying habits of customer, they made many changes in their technology and services. They launched mobile. The customer can use their phones wherever they are. New Technologies and services are: STM rings, intelligent Network (IN) Local Network Managed System, Micro-tunneling, managed leased line (myself Network, Wireless in Local Loop – WLL), India Mobile personal communication service (IMPCS) centers, answering machine services (AMS) to the building inform of RLV and DLU which has reduced the average copper loop length to less than 2 Km Direct Internet access service (DIAS), Voice Over IP (VOIP) Accident Less Internet, Internet Telephony (Webfone), Sam Park (IVRS based).

Along with the Telecom and TV revolution accompanied with changed consumer behaviour, the past decade has seen strong economic growth and an increasingly confident India.

BSNL & Reliance have launched various plans and schemes. Their plans have influenced the BSNL product to a large extent, now subscribers are increasing speedily.

BSNL is taking a number of steps to achieve its mission to provide world-class state of art technology telecom services on demand at affordable price and to provide world-class telecom infrastructure to develop our country’s economy.

Reliance Infocomm entered the segment with varying focus, different strategies and assorted aspirations. Discussed below are ten key strategic dimensions along which there new entrants to the reliance Infocomm have made their initial moves to position themselves in the newly opened sector.

There exist a large number of technological options in telecom field, each characterized by unique features, complexities, investment requirements, reliability and maintenance need.

A decade ago, mobile phones were a luxury owned by the privileged classes. Today it has become a household product that suits all packets and tastes.

Landline a few years ago, one has to ask for taking connection in a telephone exchange. One could not contact directly with their friends, relatives etc. now it has been completely eliminated now. One can call anywhere & anybody directly. It has become possible due to the introduction of new technologies.
A product mix is the set of all products and items that a particular seller offers for sale. One of the relatives of business is that most firms deal with multi-product.

BSNL product mix is the set of cellone, excel b-fone, tarang sancharnet and webfone BSNL offers all the set for sale. This enabled full mobility on a par with that offered by the GSM based CMSPs, it aggravated the already continuous arguments between the CMSPs & basic Telephone service providers over “just & fair” interconnection fees as well as just & fair fees for the license themselves. The wireless is not due to a shortage of copper wire.

Reliance basic phones are without wire that is the main difference between Reliance & B.S.N.L. landline phones.

Unless wireless network, setting up the broadband network which is based on optical fiber connectivity is very efforts, time & capital intensive. It takes enormous investment & effort to did, lay new cables, obtain right of way, building permission & a flawless integrated BSS-OSS system for integrated CIIOU operations. Reliance is excelling over the competitions legacy network & back-end systems.

Expansion of product refers to the process of adding new product items in its existing product lines.

BSNL provides many services like B-fone, WLL, Sancharnet and in Webfone they provide cellone, Excel and Broadband Services.

Reliance Infocomm provides – Wireless services, Prepaid services, postpaid services and Broadband services.

Contraction of product refers to the deletion of existing product in its product lines. Further, a firm may go up in its technology and use state of the art technology or decide to stretch the product line downwards toward a more simple technology.

Modification may be required in the existing product line or product item. These changes may be tangible or intangible and may be achieved by reformulation, redesign, changing unit sizes and adding features.

BSNL launched mobile services in Nov.2002, with more extensive coverage than any other operator. This has enabled it to dominate in areas that previously had no connectivity.

Reliance had intended to begin charging for data as of June 30. This date has since slipped toward the end of 2004. Reliance has made no indication of how it would charge or how it anticipates that subscribers would respond.

Alteration of existing product refers to the change in the product according to the changes in the environment. Alteration of existing product includes change in the colour of the product, its design, the addition of a new feature, a change of package or a change of brand name.
B.S.N.L. furnishes rural postmen with phones for use by customers along their routes. It is stimulating long distance traffic by encouraging long distance traffic by encouraging villagers to call friends and relatives who have migrated to the cities.

Reliance Infocomm on June 14, 2004 announced that it would offer RIM postpaid customers the option to migrate to prepaid service. Those migrating get a promotional recharge voucher with free talk time of Rs.200 pre-loaded on the prepaid account. The offer was valid till July 31, 2004.

Reliance Infocomm has announced the launch of world card, a prepaid rechargeable account-based service that can be used from any RIM (Post paid & Prepaid) or Reliance India Phone (Fixed wireless phones & Terminals).

Accomplished through clear strategy, installed lines, by giving a better commission and better service. Reliance’s aims to equal BSNL’s PCO business by March 2006.

Reliance major challenges stem from competition from BSNL. Reliance success lies in how fast Reliance takes their service to all the corners of India. This in turn depends upon the number of points of interconnect (POI) Reliance get if BSNL gives POI soon, then Reliance can expand rapidly.

Reliance introduced 93 migrations; it is more of a perception in the minds of the customers.

The technique employed by firms to render their product, brand distinct & different from the competing brands, is termed product differentiation can be based on product, channel & promotion. Product however lands the maximum scope for differentiation.

Reliance, the largest telecom company in telecom sector is positioned as a company offering good quality telecommunication service at a low price but reliance has spun further differences to dusting with itself from B.S.N.L. reliance is offering mobile services at cheaper rates. They charge lower price than BSNL, free call services from Reliance to Reliance. It offers R-world facility on the mobile.

Market segmentation involves aggregating prospective buyers into groups that (1) have common needs and (2) will respond similarly to a marketing action. The groups that result from this process are market segments, a relatively homogeneous collection of prospective buyers.

It sells data capable phones to all such subscribers, even those who do not possess an Internet in India services. Reliance reasons that they can still become occasional data users. Reliance states that 30% are “hardcore” data users & 70% “occasional” users.

The idea of positioning relates to the way consumers perceive and evaluate products and services. Specifically, it relates to the way in which consumers rank the features and attributes of a service against those of competing services. Consumers will perceive certain brands as being higher or lower in quality, for example, or of being
more or less expensive than other brands. These perceptions stem from a complex set of ideas and beliefs about products or services, which make up a consumer's attitude towards them.

Reliance says that we are number two after BSNL. On the wireline front, BSNL has been the incumbent leader if you look at household connections. The bulk of the market is with BSNL. Reliance says BSNL is ahead of all of us. But we will be a head soon as we have to take our services to the serious third and fourth layer of towards and beyond into the village, mandals etc. We are facing multi-pronged competition we are not fighting any one.

A basic decision in marketing products is branding, in which an organisation uses a name. The first decision is whether to develop a brand name for a product. In the past, producers and intermediaries and cases, without any supplier identification. Today, branding is such a strong force that hardly anything goes unbranded.

Since the early 1990s, the services sector in India has been paying a lot of attention, or so it would seem, to delivering customer services and satisfaction. Service brands across categories from banks and credit card companies to airlines and retailers have been jumping on the customer is important to us bandwagon. This is most evident in service brands attempting to impress their target group through brand positioning that uses customer's services as a differentiator.

Reliance Infocomm has been allotted an exclusive 'level 3' prefix for its 18-circle basic services numbering plan. Top sources in the union communications ministry confirmed that all “Reliance Infocomm fixed-line numbers would be prefixed with the digit 3”.

Many service providers offer a range of services at various price levels to meet the needs of different target segments that may have different levels of spending power. There are many alternative pricing concepts and techniques available to marketing organisations.

The price skimming approach can help speed up the payback period. Frequently, the price reduces after a period as the products become more popular and sales volume increases.

In this case the price is set at a low level in order to attract high volume sales, thus penetrating the market and gaining substantial market share. For new products and services the payback period is lengthy but with the advantage of establishing a strong market position.

This is particularly relevant in industrial and business-to-business markets where individual contracts are priced according to specification. Service providers such as architects and consultants quote a price according to the needs of the project.

Sales promotion techniques often use tactical pricing reductions as a means of increasing sales over a short period. Discounts, special offers, vouchers, rebates and
even 'buy now pay later' schemes and interest-free credit are all examples of promotional pricing.

Break-even analysis is a basic tool which can be used to calculate the minimum quantity of a service which must be sold in order to cover the costs of producing and delivering that service; in other words, to break even.

Organisations need information about competitors' prices in order to make pricing decisions.

Market share is the ratio of the firm's sale those of the industry (competitors plus the firm itself). Companies often pursue a market share objective when industry sales are flat or declining they want to get a larger share.

B.S.N.L & Reliance want to maximize their market share. They believe that a higher sales volumes will lead to lower unit costs & highest long-run profit. They set the lowest price assuming the market is price sensitive.

BSNL did this in India recently when each cut their prices to increase their respective market share.

On 27th August 2004, B.S.N.L on Friday also cut the prepaid cellular charges (to any cellular network) for intra-circle (local) to Rs.0.90 per minute from Rs.2.20.

In December, Reliance slashed them to Rs.O.40. Other operators were compelled to follow. In little more then three years, competition reduced per minute charges by 90%. Access, prepay, roaming, & messaging tariffs, likewise, fell.

BSNL & reliance did this in India in telecom sector recently when each cut their prices to increase their respective market share.

India's telecommunications sector, like the broader economy, has the potential to grow rapidly, but it remains underdeveloped and poorly regulated.

It has invested over Rs.2,000 crore ($20 billion) and it hopes 15 lacks (1.5 million) customer will be using its cellular services by March 2003. That’s 10 percent to 15 percent of the entire cellular market.

Cellone was hopping to get about 8,100 subscribers in Lucknow initially. What happened was far beyond their wildest hopes. The first 8,000 subscribers signed on in two days. One the third day the company closed advance bookings after touching the 10,000 marks.

About ten percent of the total is from enterprise, but in terms of revenue I believe it would be higher than 15% or so. Market shares in the broadband network coverage area.

A firm may set an annual target of a specific Rupees volume of profit, which is called target profit pricing. Suppose Reliance Infocomm owner wishes to use target profit pricing to establish a price for a Samsung mobile and assumes the following:-

- Variable cost is a constant Rs.517 per wire.
- Fixed cost is a constant Rs 6,11,000.
- Demand is insensitive to price up to Rs.1410 per unit.
- A target profit of Rs.1,64,500 is sought at an annual volume of 500 units. For most products, different demand levels & and sales volume may materialize at different price levels. And different volume levels have different associated cost levels.
- Reliance Infocomm are moving into the hinterland with a target of setting up infrastructure across 5,000 towns in the current fiscal.
- BSNL go to rural since they are not concerned about profit and loss.
- Reliance Infocomm’s wireless business, Feels that the target of 250m by 08 is achievable at Rs.1,000 or less. His rivals in other cellular companies do not share the same confidence.
- In several industries, competition oriented pricing methods are followed competition based pricing, or competitive purity pricing does not, however, mean exactly matching competition.
  - Premium Pricing
  - Discount Pricing
  - Going rate Pricing
- BSNL locals cell rates have dropped up to 60 percent.
  All fixed line subscribers of B.S.N.L will benefit from a 33 percent reduction in STD call charges.
  Among the fixed line subscribers, those making calls beyond 1-00 km will be changed Rs.2.40 per minute for a 30 minutes pulse in place of Rs.3.60 per minute for a 20 minutes pulse.
  Under the revised rates for fixed line phone users, the call charges for a distance beyond 100 km will be Rs.1 against the existing Rs.1.80 a minute. The call charges for distance beyond 200 km would be Rs.2.40 per minute in place of Rs.3.60 a minute. The fixed line subscriber base of BSNL is 35 million.
  Calls made from a PCO to a mobile subscriber of Private operators such as Airtel and Hutch will also cost more from Rs.2 for a two-minute call at present, BSNL will now charge Rs.1.20 for a call of 45 seconds made from its PCOs. The same amount can be used to make a 60-second call to a BSNL mobile subscriber.
- Tariffs have continuously dropped. At first increasing competition among the original full mobility operators drove this. Later it was driven by the greater competition from the limited mobility operators with expanded competition, tariff declines are spreading beyond the entire telecom industry.
- Tariff wars began with reliance Infocomm bringing down pre-paid tariffs on all intra circle calls to 99-paisa per minute.
Reliance Infocomm claims that it can drop prices for international bandwidth by up to 70 per cent using spare capacity on its Flag Telecom undersea cable.

A basic idea in business, economics, and indeed everyday life is marginal analysis. In personal terms, marginal analysis means that people will continue to do something as long as the incremental return exceeds the incremental cost. This same idea holds true in marketing and pricing decisions.

As a purely economic matter, predatory pricing is a form of anticompetitive pricing whose sole purchase is to harm competitors (by putting them out of business) and to harm competition (by reducing the number of competitors until monopoly like conditions are credit/ restored). It consists specifically of setting the unit price of a product or service below an applicable price floor. Pricing below that price floor cannot possibly enable the firm that prices predatorily to recovers its variable costs (let alone its fixed costs).

Tariff wars began with reliance Infocomm bringing down pre-paid and postpaid tariffs on all intra-circle calls to 99-paisa per minute. Decline in tariffs has stimulated subscribers and revenue growth. For maximizing profit, Reliance has reduced their price and has launched new schemes to earned more revenue.

There is an increasing trend to price the product on the basis of customer's perception of its value. This method takes into account other elements of marketing mix and the positioning strategy of the firm. For the value of the product is a function of all these variables. This method helps the firm in reducing the threat of price wars. In fact, it can help the firms steer out of the ugliest of price wars.

BSNL's new 'Tarang' scheme offers four options to its customers to own a WLL handset. The subscribers can own WLL mobiles handset by paying the premium for the comprehensive policy taken for the cost of the handset.

The subscribers get refund when they return the handset. Fourth, the customers can bring their own handset.

New Delhi: High speed internet prices are beginning to crash with cable service providers reducing 24 hours net Rs.300/- a month.

Reliance inforom is also offering mobile services to the customers. They fixed different prices for different customer. Reliance Infocomm is offering handsets to subscribers on a down payment of Rs.501 and monthly charges of Rs.200 for a specified period. As for the tariff plans, the subscriber can choose from three schemes. The Dhrubhali Ambani Pioneer offers (DAPO) and two other plans - Budget 149 and Budget 249.

Marketing channels can be compared with a pipeline through which water flows from a source to terminus. Marketing channels make possible the flow of goods from a producer through intermediaries, to a buyer.

Some intermediaries - such as wholesalers & retailers - buy, take title to & resell merchandise, they are called merchants, others brokers manufacturers.
representatives, sales agents reach for customers & may negotiate on the producer’s behalf but do not take title to the goods they are called agents still others transportation companies, independent warehouses banks advertising agencies assist in the distribution process but neither take title to goods nor negotiate purchases or sales they are called facilitators.

Accessibility refers to the ease and convenience with which a service can be purchased, used or received.

Service providers can choose where to locate their service outlets, or where to provide their service in order to maximize their market opportunities, in all cases except those where to service is location specific (tourist destinations and historic sites, for example). Factors influencing such decisions include:

- Market size and structure by geographical region
- Location of potentially attractive consumer segments
- Organisational objectives
- Level of market coverage desired
- Number and type of competitors in region
- Local infrastructure; good road access, facilities, public transport network
- Distribution method

For direct distribution to be a feasible option, certain considerations must be taken into account.

Whilst it has been established that services organisations will not necessarily use channels in the same way as manufacturers of physical products, various types of intermediaries are used in many service situations.

Many services are offered via networks of agents or brokers.
Franchising involves the sale of a successful business formula to an external buyer or franchisee that runs the operation in a specified location.
Franchisees can find that the promised profits do not materialize and become demotivated and let the business slide. Some may have been the victims of the kind of unscrupulous trading practices, which have been exposed from time to time.

The number of ‘levels’ determines the length of the channel. The more the tiers the longer is the channel. The number of ‘channel members’ does not determine the length of the channel.

(1) A Zero-Level channel
(2) A one-Level Channel
(3) A two-Level Channel
(4) A three-level channel
(5) Reverse – flow Channels
(6) Service sector Channels
(7) Information highway Channels
The channel can be best compared to that of a pipe. It is a delivery system to bring the desired benefit to a large number of consumers there for a management task or structure that deals with the delivery of benefits to a potential set of customers through a pre designed or structured channel is what channel management is all about. It therefore becomes the key link between the company and its consumers and its more often than not it follows the outsourcing model there are companies that work along with their own channels like Bata for instance.

Speaking specifically of Reliance Infocomm, Reliance has a very complex architecture as far as the channel is concerned.

A nature of a channel setup varies in terms of product and services a channel that is setup for a product is usually a one time interaction and thereby a very simple transaction.

Reliance is today managing a full spectrum channel organisation as they have all possible elements. It cannot get more complicated in terms of all overall structure. It is therefore a big challenge to manage a channel of this complicity.

It is proposed to build up a three tier private channel of marketing and distribution of BSNL services as under-

1. Franchisee’s showroom (exclusive basis)
2. Sub Franchises outlets (non-exclusive basis)
3. Retailers outlets (non-exclusive basis)

Retail point will act as outlets for BSNL prepaid cash coupons such as recharge coupons, it cards etc. Compensation to retailers will be responsibility of franchisee. BSNL will not be a party directly/indirectly between franchisee appointed.

Reliance Webworld is a world-class, nation wide chain of retail outlets for all Infocomm products & services. Unfolding initially as a customer convenience interface for all reliance Infocomm products the web worlds, with the introduction of Java green & the Broadband center have today evolved into a one-stop shop for digital information entertainment & communication.

The different type of intermediaries differs significantly in their roles, capabilities, territories, remunerations, size of operations cost of operation and amenability to control by the principal.

A marketer or a sale selling agent is usually a big marketing intermediary with large resources and extensive territory of operations the usually has his own network of stockiest, semi-wholesalers and retailers.

A ‘stockiest’ or ‘distributor’ is also a large sized operator but not on par with the marketer or sole selling agent in level size and territory operation the stockiest or distributor operator under the marketer /sole selling agent whenever the manufacturer does use a marketer or sole selling agent and as such stockiest/distributors are one level below the marketer/sole selling agent.
Unlike merchant wholesalers agents and brokers do not provide fewer channel functions they make their profit from commissions or fees paid for their services where as merchant wholesalers make their profit from the sale of the merchandise they own.

The most visible variation of contractual systems is franchising, a contractual arrangement between a parent company (a franchiser) and an individual or firm (a franchisee) that allows the franchise to operate a certain type of business under an established name and according to specific rules.

Franchisee will generate demand for providing services permitted by BSNL to Franchisee. BSNL Franchisee will target both individual and corporate customers. Franchisee will receive, attend and rectify complaints and provide after sales services.

Reliance started the PCO operations on April 1, 2004. The initial target was one-lack line in 32 cities, which reliance achieved in just five months. The subsequent target were 3.5 lack lines, which was reached in march-2005 in just under one year – a record for fastest acquisition for any operator in the PCO business.

All LDA or local business associates should be small enterprises that are able to manage a field team. Investment for him is not heavy. He has to pay a small security deposit for STD and another one for local lines.

Reliance Infocomm has 3.5 lacks STD lines in just few days. PCO comes under a different category of service.

With the distribution network in place the team is now focused on increasing sales of RIM through concerted efforts and special programs. Reliance now aims at doubling the customer base.

Reliance also has some outsourced retail channel in the form of point of sales (POS) they provide a good reach in the most cost effective manner.

If we look at the WWE Franchisees they are providing complete customer care on behalf of the company for Example, if the customer has a problem, he or she first approaches the WWE where the information relating to his or her account is available on the clarify.

In marketing promotion means all those tools that a marketer uses to take his product from the factory to the customer and hence involves advertising sales promotion personal selling public relations publicity and merchandising all these tools have one dimension in common.

Communication is the process of conveying a message to others and requires six elements a source a message a channel of communication a receiver and the processes of encoding and decoding.

Encoding and decoding are essential to communication encoding is the process of having the sender transform an abstract idea into a set of symbols.

- Affordable and effective communication facilities to all citizens.
- Provision of universal service to all uncovered areas including rural areas.
Encouragement to development of telecom in rural areas making it more affordable by suitable tariff structure and making provision of rural communications mandatory for all fixed service providers.

Building a modern and efficient telecommunications infrastructure to meet the convergence of telecom, IT and the media.

Conversion of PCOs into Public Teleinfo centers equipped with multimedia capability like

ISDN services remote database access government and community information systems etc.

Available telephone on demand by the year 2002 and sustain it thereafter so as to achieve by March 2007 a tele-density of 11.5 at the national level and three for rural areas.

Today the total number of Internet connections in the country has already crossed 3 million. It is estimated that about 23 million new Internet connections will be added during the Tenth five-year plan.

BSNL is providing Internet Dhabas in all block headquarters. Internet has already been set up in 2205 block headquarters by 31.05.2001.

Private investment is also expected to play a leading role in the expansion of telecom services.

BSNL already has broadband Internet service available widely around the country the state run company is now aiming to conquer the WI-FI Internet centers with low introductory tariffs and high-speed net access.

The limit for this business plan is 2 GB and it is lower than Rs.1,200 plan for business users. These price cuts came in wake of the coming independence Day and the prices would be applicable from August 16, 2005. Home users under these new plans get 256 Kbps at Rs.200 with a download limitation of 400 MB.

Reliance India mobile and film star Kamal Haasan today announced that as part of the Reliance India show time plat form for film promotion the company had tied up with the tamil blockbuster movie Virumandi starring the actor in the lead role.

An R-World contest on the movie is being undertaken for RIM customers where in the winners are entitled for prizes such as tickets to the movie cassettes, audio, CDs and the biggest prize in winning goodies like the costumes of the star cast of the movie and a video chat with the star cast and crew of the move.

The Reliance redefined the concept of mobile applications with their unique R-world suite of data applications available in Reliance India mobile phones.

Reliance first plan is to achieve leadership right now it is Airtel, Hutch and then Reliance are rapidly closing the gaps they want RIC (NCR) to be the largest circle for any operator across the nation customer satisfaction and customer delight are the other major goals Reliance have chalked out for the future.
Advertising is any paid form of non-personal communication about an organisation, good, service, or idea by an identified sponsor. Advertisers includes not only business firms, but also museums, charitable organisations, and government agencies that direct messages to target publics. BSNL is having a very useful presence in the form cabinets/pillars in the public places. This space is ideal for the use of publicity/advertising especially in areas where they are located in permanent public place.

In few cases, the target of erecting iron structure for mounting of flex sheets has badly slipped.

Rent-free locations at non-BSNL locations should also be identified in coordination with local authorities such as Nagar Palika, PWD, etc. BSNL selected following print media for advertisement like:

- Newspaper
- Magazine
- Souvenirs

BSNL select following electronics media for Advertisement:

- Regional channels
- National channels but for regional event.
- Cinema Halls/Cable T.V.

Sales promotion is a short-term inducement of value offered to arouse interest in buying a good or service. Sales promotions are offered to intermediaries as well as to ultimate consumers.

Public relations is a form of communication management that seeks to influence the feelings, opinions, or beliefs held by customers, suppliers, employees, and other publics about a company and its products or services.

The second major promotional alternative is personal selling, defined as the two way flow of communication between a buyer and seller, designed to influence a person’s or group’s purchase decision.

Various publicity media include TV ads, bus back panels, brochures, leaflets, banners, posters, newspapers ads etc.

Phase 11 of Rim has brought mobile telephone to their small towns (with well under 50,000 population) in the real sense; phase 11 is the name of Infocomm’s expansion into greater India, covering nearly 4500 towns.

On Wheels was Reliance brainchild this strategy could be replicated in other circles to gain greater visibility.

Holding Nukkad natakas, companies on mobile wwe vans creating local Rim songs are same of Reliance localized initiatives.

Reliance also used metal signboards for advertising. They advertise their product by given a slogan-‘Kar lo Duniya Mutthi mein’
A sales contest aims at inducing the sales force or dealers to increase their sales results over a stated period, with prizes (Money, trips, gifts, on points) going to those who succeed.

Telecommunications companies set promotion expenditures at a specified percentage of sales (either current or anticipated) or of the sales price. Reliance & BSNL set their promotion budget to achieve share of voice purity with competitors. Determining the ideas amount for the Budget is difficult because there is no precise way to measure the exact results of spending advertising rupees.

In the percentage of sales budgeting approach, funds are allocated to advertising as a percentage of part or anticipated sales, in terms of either rupees or units sold. A Second common approach, competitive parity budgeting, is matching the competitor's absolute level of spending or the proportion per point of market share. It is important to consider the competition in budgeting.

Common to many small business and is all you can afford budgeting in which money is allocated to advertising only after all other budget items are covered. The best approach to budgeting is objective and task budgeting, whereby the company (1) determines, its advertising objectives. (2) Out line the tasks to accomplish these objectives, and (3) Determines the advertising cost of performing their tasks.

The direct fixed costs are costs of physically distributing samples, placing advertisement and point of purchase material, etc. variable costs are payments made to the retailer for each coupon redeemed.

The final stage in the promotional management process is that of monitoring and evaluating the programs. In order to do this effectively, controls must be built into the plan to enable its effectiveness to be measured. This control stage is an essential part of all planning. It serves a number of purposes in relation to the promotional plan and helps to determine the following:

- Are communications objectives being met?
- Has the target audience received the message?
- Have they received the right message?
- Are budgets being adhered to?

An advertisement many go through posters after it has been shown to the target audience to determine whether it accomplished its intended purpose.

To evaluate the program, manufacturers can use three methods: sales data, consumer surveys, and experiments.

Sales promotion can also be evaluated through experiments that vary such attributes as incentive value, duration and distribution media. For example coupons can be sent to half of the household in a consumer panel.
6.2. FINDINGS

1. ROLE OF TRAI

The crucial role that the regulator and government play in the communications in most telecommunications markets is often forgotten. Unlike the markets for fast moving consumer goods (FMCGs) - detergent, cool drinks or cars - it takes more time, money and approvals to enter service markets like telecommunications. There are conditions to be met before a company is allowed to set up any infrastructure. Operators sometimes pay large license fees, have fixed service areas, must comply with ownership rules, conform to technology stipulations, and accept controls on tariffs. These conditions frequently make or break a telecommunications business. Several major Indian and foreign companies had, in fact, quit the telecommunications business in India, before 1999 when the licensing rules were liberalised.

Regulation performs one absolutely critical role. Users on one company’s network would be unable to speak to a person on another network, if the networks were not interconnected. This is possible because sector regulators like TRAI mandate that companies interconnect at a place and price of TRAI’s reckoning. If BSNL, which had most subscribers to begin with, had delayed interconnection to its network, private operators would have had a tough time enrolling subscribers - since the latter couldn’t call most of existing lines.

The low price of services and the resultant phenomenal growth in the market is because government and the regulators have worked to bring down costs incurred by the service providers. The price of leased lines provided by operators like BSNL, who had a near monopoly, could not have been done by competition alone. Similarly, there is little it can do to lower the price of government-controlled spectrum, which is critical for cheap wireless services. Government and TRAI intervention have been critical here.

In the telecommunications sector, regulation of certain elements such as interconnection, radio spectrum to carry wireless signals, fair competition, license and other fees etc is a precondition for effective competition and the benefit that consumers derive from it. For rural areas, this is even more critical.

Jhunjhunwala feels that many existing rules hinder rural communications. His suggestion - “deregulate rural [telecommunications]”. In other words, allow free entry, and players to use available radio spectrum freely and creatively. Do not insist on defining type and size of areas, which players can serve. Arun Mehta affirms this when he says, “Open up spectrum to innovative use”. There are many such regulatory measures that may well determine how and when networks can expand to rural areas.

The achievements and challenges of the new liberalised telecommunications sector in India reflect the contrasting nature of urban and rural markets. They demonstrate the effectiveness, or otherwise, of regulators in addressing the challenges
aced by large proportion of India’s civil society in its wait for effective connectivity. TRAI could have devised systems that empower consumers more effectively especially because of its limited mandate in dealing with their issues. For example, consumers might need help to make sense of confusing telephone bills or wish to know why or how to subscribe to an internet service. At a technical level, this could include why issues like interconnection and spectrum are important to the communities. It could also provide information to assist investors especially in rural areas. It could point to other sources where such information could be available. But there is little on these lines on TRAI website. Learning Initiatives on Reforms in Networked Economies (LIRNE) in Sri Lanka, has identified several such features on regulatory websites that could make them deliver better value to end users. TRAI website was rated lower than many of its peers.

In his response to some of these issues, outgoing Chairperson of TRAI, found little wrong with its working. He said the civil society was inadequately represented, weak and poorly organised which TRAI could not help. The Universal Service Obligation Fund, constituted to subsidise rural communications has largely functioned as an opaque accounting bureaucracy with close to US$2 billion of its collections unspent. There are recent reports that USOF will amend its rules to provide support to rural telecommunications infrastructure like towers etc. The USOF has no established consultation process. Civil society players have little access to it or its thinking on issues of import.

Civil society organisations (CSOs) have varying levels of expertise and experience in interacting with regulators. Many issues in the forefront of telecommunications debates – access deficit charges, interconnection rates, niche operators for rural areas, the spectrum requirements for GSM and CDMA technologies etc - require information and skills which CSOs frequently lack. So their engagement on these issues is expectedly limited.

Without relevant and reliable information, their involvement can only be limited and even counter productive. CSOs have had some impressive wins. For example, the opening up of wi-fi based services recently is largely the result of CSO’s relentless pursuit, which is a greater priority for it than the big players. But these ‘wins’ are rare.

The telecom revolution has served up competition and cut prices, but unfortunately in many a case has left the user poorly served too. As much as the telecom companies, the regulator has an important role in ensuring quality service, especially as the state is seeing a receding role for itself in this core sector, says Bhanoji Rao.

COMPETITION has come to stay in the telecommunications sector. It is a vital infrastructure sector and a key driver of economic growth as well as consumer welfare. In such an important infrastructure sector, if it is decided to limit government participation and to allow private actors, then it is important that the state takes on the
role of an effective regulator to control possible wasteful competition and to ensure fairness of pricing and efficiency of service. This country has allowed private sector participation in the telecom sector since the 1990s and has put in place a regulatory mechanism since 1997, as described below briefly.

In 1994, when the government announced the National Telecom Policy, the objectives included, quite rightly, the availability of telephone on demand and provision of world-class services at reasonable prices. The policy "recognised that the required resources for achieving these targets would not be available only out of Government sources and concluded that private investment and involvement of the private sector was required to bridge the resource gap."

Private sector participation was allowed in a phased manner from the early 1990s, initially for value added paging and mobile services and thereafter for fixed telephone services. Unlike retail stores or small industries, one must be careful not to allow any fly-by-night operator in the name of encouraging private sector participation. Hence, the government used a competitive bidding process for private sector participation.

To iron out the problems and deficiencies in the sector, which have cropped up since the early 1990s, the New Telecom Policy 1999 was announced. As always, the drafters are never short of language efficiency in describing the objectives: "Access to telecommunications is of utmost importance for achievement of the country's social and economic goals. Availability of affordable and effective communications for the citizens is at the core of the vision and goal of the telecom policy"; and "Create a modern and efficient telecommunications infrastructure taking into account the convergence of IT, media, telecom and consumer electronics and thereby propel India into becoming an IT superpower."

The citizenry should be grateful to the drafters for the inclusion of the following objective as well: "Transform in a time bound manner, the telecommunications sector to a greater competitive environment in both urban and rural areas providing equal opportunities and level playing field for all players". The 1999 policy has clear provisions for interconnectivity among different service providers.

Well ahead of the New Telecom Policy of 1999, the Telecom Regulatory Authority of India (TRAI) was formed in January 1997 to provide an effective regulatory framework and raise safeguards to ensure fair competition and protection of consumer interests. "Section 13 of The TRAI Act gives adequate powers to TRAI toissue directions to service providers," said the Policy statement.

Let us now see a sampling of some ground realities.

A couple of years ago, in Bangalore, one was witness to a German national upbraiding a junior officer of a retail outlet that sells cellular phone connectivity of a well known private operator. The German's problem was simple: His deposit was not refunded more than two months after his post-paid cellular service had been
disconnected. He and his family were close to their departure date from India and he 
had already made several trips to the retail outlet to find out about the fate of his 
refund. The response he got was the same at every visit: The head or the regional 
office would directly send a cheque and that the retailer has no more information. The 
customer could try his luck calling the office concerned. Of what use competition if the 
customer is not served well?

Recently, a group from Andhra Pradesh went on a tour of the North. Three 
members of the group had cell phones, each with a pre-paid SIM card of a fairly large 
value. From the three pilgrim centres the group visited, none could call their home on 
their cell phones. Every time they tried, they got the message that they do not have the 
facility for making outside calls and advised them to contact the nearest customer care 
centre of a company, other than the one that had provided the pre-paid cards.

Upon return from the pilgrimage, one in the group contacted the company that 
had sold them the connection. They were told that those with a connection taken from 
the particular company would not be able to make calls if they were physically located 
in some of the northern States. Is this the service for the consumer, after over a decade 
of competition into the sector?

A quick survey found that the following were the typical complaints of 
customers: Bill not received on time; payments made but not taken into account and 
hence un-updated records; coverage area not fully made known; local calls charged at 
STD rates; and, ironically, a host of communications problems between parent 
company and selling agents.

Let us now turn to Internet connectivity. Here too, as in CMTS, there are many 
actors. A friend was using the Internet connectivity provided by a public sector 
company. He was happy with the service and the fact that connectivity was assured 
regardless of whether the dial up was from a metro or a non-metro.

Then it became private and the Internet service was no longer available from 
some of the non-metros, which were served earlier. My friend had to get a dial up 
connection from BSNL to ensure Internet access from almost anywhere.

He, of course, laments that BSNL's sancharnet mail site does not allow 
automatic saving of an address.

Of what use is privatisation and competition if the consumer is not to benefit?

There is nothing inherently right or wrong with private and public enterprises. 
We have examples of great and shining public enterprises. There are also some poor 
examples of private enterprise. What we must have — in either case — is an effective 
regulatory mechanism to ensure consumer welfare.

These are days of relationship marketing (RM). RM is about customer retention 
and building high level of customer loyalty. RM is vital for success of companies in 
multi-firm competitive situations, where product differentiation is difficult to practice. 
Relationships can be built and nurtured only on the basis of trust.
Trust is built on the basis of quality of service and efficiency of after sales service. While telecom companies must remember that they will lose out in the long run if they do not serve the consumer, it is the job also of TRAI to ensure that the long run will come in a relatively short time to inefficient companies.

REGULATORY BODIES:
The wireless planning and coordination (WPC) wing, set up in 1952 is the national radio regulatory authority to ensure orderly utilisation of radio frequency spectrum and Geo stationery orbit (GSO). It is supported by the WMO in this activity with the opening up of the economy the number of players and services in the telecom sector is bound to increase manifold. Therefore the organisation would need to be further strength ended and modernized enable it to perform its regulatory functions effectively.
The TRAI set up in 1997 is the apex organisation responsible for performing the regulatory functions in the telecom sector as a result of the TRAI amendment acts 2000 Telecom Development Targets.

Major initiatives/action plans envisaged are-
1) To achieve a target of tele-density of 9.91 by March 2007 about 650 lacks new telephone connections need to be provided during the plan period.
2) Telecom sector needs to be treated as an infrastructure sector for the next decade or so in order to achieve the targets of tele-density in line with the objectives laid out in the NTP 1999
3) Government’s broad policy of taxes and regulation for the telecom sector has to be promotional in nature with a view to ensuring optimum growth in the coming years.
4) Ensuring fair and timely interconnection in the multi operator scenario is one of the major inputs for sustaining high growth.
5) The existence of an independent and effective regulatory body is crucial for ensuring optimum growth and free and fair competition the basic principles that need attention in this regard are:
   - Specify time limits for various regulatory procedures.
   - Establish a clearly specified schedule of penalties for not meeting the license conditions and the conditions under which they apply.
   - Developing a framework for interaction between regulator and consume bodies so as to ensure continuous flow of information and feed back from the consumers in order to achieve desired standards of service quality and regulations.
   - The policy governing development of rural telecom services need to be promotional in nature with a view to boost tele-density in these areas in line with the objectives of NTP 1999.
2. RESEARCH & DEVELOPMENT ACTIVITIES

RESEARCH & DEVELOPMENT ACTIVITIES OF BSNL

C-DOT seeks lost glory with WiMAX

NEW DELHI: WiMAX may revive the old glory of centre for development of telematics (C-DOT), India’s premier telecom research and development organisation. C-DOT Alcatel Research Centre (CARC), a joint venture between C-DOT and Alcatel, has started lab trials for indigenously developed WiMAX technology. By the end of this financial year, the technology will be ready for transfer to equipment manufacturers.

The finance ministry has earlier objected to the grant given to C-DOT saying that C-DOT should earn its own funds so that it can support its activities. Presently, the government largely funds it. Once, the finance ministry was of the view that it should be closed down or public sector undertakings like Bharat Sanchar Nigam (BSNL) and Mahanagar Telephone Nigam (MTNL) should fund it.
Some observers consider WiMAX as threat to 3G. They feel that it is a destructive

Telecommunications: An Indian Perspective

Organisational Structure in Telecommunication

The Department of Telecom (DoT) and Bharat Sanchar Nigam Limited (BSNL) are Government of India Departments under the aegis of the Ministry of Communications.

The Department of Telecom (DoT) has its role in policy making, licensing, and coordination matters relating to telegraphs, telephones, wireless, data, facsimile, telematic services, and other like forms of communications. In addition, DoT is responsible for frequency management in the field of radio communication in close coordination with international bodies. It also enforces wireless regulatory measures for wireless transmission by users in the country.

Bharat Sanchar Nigam Limited (BSNL) is the premier telecom service provider of India. BSNL has a presence throughout the length and breadth of India. The main functions of BSNL include planning, engineering, installation, maintenance, management, and operation of voice and non-voice telecommunications services all over the country.
Capacities, Capabilities and Trends in the Telecommunications Sector -

Telecom Equipment Manufacturing Sector
The Indian telecom equipment manufacturing industry manufactures a complete range of telecom equipment using state-of-the-art technologies designed specially to match the diverse terrain and climatic conditions.

Switching
Digital switching system technologies of foreign companies (Alcatel, Siemens, Fujitsu, AT&T, GPT, Ericsson, and NEC) have been validated and approved by DoT for introduction in the Indian network.

Transmission
With the introduction of value-added services, demand for a radio transmission system has undergone a major change.

Terminal Equipment
With rapid growth in basic and value-added services, the need for a wide variety of terminal equipment, including telephone instruments ranging from normal pushbutton to multiline feature phones, is bound to grow.

Telecom Network in India

Current Status

<table>
<thead>
<tr>
<th>Service</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct exchange lines</td>
<td>367.12 lakh</td>
</tr>
<tr>
<td>No. of telephone exchanges</td>
<td>31952</td>
</tr>
<tr>
<td>Switching capacity</td>
<td>402.60 Lakhs</td>
</tr>
<tr>
<td>Village public telephones</td>
<td>409919</td>
</tr>
<tr>
<td>Optical fiber</td>
<td>228795 RKms</td>
</tr>
<tr>
<td>Microwave</td>
<td>190592 RKms</td>
</tr>
<tr>
<td>TAX capacity</td>
<td>24.72 lakhs</td>
</tr>
</tbody>
</table>

National Long Distance:
At present, BSNL/MTNL is operating the service. Private operators are expected to start service.
Telecom Equipment

Production (in Rs. Crores)

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996–97</td>
<td>8300</td>
</tr>
<tr>
<td>1997–98</td>
<td>9960</td>
</tr>
<tr>
<td>1998–99</td>
<td>10,000</td>
</tr>
<tr>
<td>1999–2000</td>
<td>10,800</td>
</tr>
<tr>
<td>2000–2001</td>
<td>11,000</td>
</tr>
</tbody>
</table>

Telecom Equipment Exports (in Rs. Crores)

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996–1997</td>
<td>240</td>
</tr>
<tr>
<td>1997–1998</td>
<td>296</td>
</tr>
<tr>
<td>1998–1999</td>
<td>250</td>
</tr>
<tr>
<td>1999–2000</td>
<td>180</td>
</tr>
<tr>
<td>2000–2001</td>
<td>390</td>
</tr>
</tbody>
</table>

Teledensity Projection

<table>
<thead>
<tr>
<th>Year</th>
<th>Teledensity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002–2003</td>
<td>5.34</td>
</tr>
<tr>
<td>2003–2004</td>
<td>6.6</td>
</tr>
<tr>
<td>2004–2005</td>
<td>8.07</td>
</tr>
<tr>
<td>2005–2006</td>
<td>9.69</td>
</tr>
<tr>
<td>2006–2007</td>
<td>11.5</td>
</tr>
</tbody>
</table>

Fixed and Mobile Phones Projections

<table>
<thead>
<tr>
<th>Year</th>
<th>Fixed phones (Lakh lines)</th>
<th>Mobile phones (Lakh lines)</th>
<th>Total (Lakh lines)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002–2003</td>
<td>44.8</td>
<td>67.2</td>
<td>112</td>
</tr>
<tr>
<td>2003–2004</td>
<td>56.8</td>
<td>85.2</td>
<td>142</td>
</tr>
<tr>
<td>2004–2005</td>
<td>68</td>
<td>102</td>
<td>170</td>
</tr>
<tr>
<td>2005–2006</td>
<td>76</td>
<td>114</td>
<td>190</td>
</tr>
<tr>
<td>2006–2007</td>
<td>88</td>
<td>132</td>
<td>220</td>
</tr>
</tbody>
</table>

Research and Development

Research and development activities are being carried out at various manufacturing units of India-based MNCs, and notable R&D is also being carried out at C-DoT, whose rural exchanges are very successful in the world market, apart from IIT Chennai, who have developed COREDECT technology. Application-oriented
R&D is also being carried out at ITI Bangalore, IIT Chennai, BEL, Bangalore, Shyam, and HFCL at New Delhi.

DoT currently has a number of training centers all over India apart from IITs and other technical institutes all over India. Apart from this, Indian companies engaged in the telecom sector are also venturing into telecommunication training to fulfill the ever-growing need for expert professionals in this sector.

The Future Scenario: The Telecom Equipment Manufacturing Sector

The main objective of the 10th five-year plan is to make available reliable telecom services on demand even in rural areas at reasonable prices and to improve the teledensity in tune with NTP-99. NTP-99 emphasizes the importance of convergence and the desirability of encouraging all technologies to achieve these objectives. A substantial part of the telecom equipment deployed in the network is still imported. The post-liberalisation scenario posed many challenges to the telecom R&D and manufacturing sectors.

RESEARCH AND DEVELOPMENT ACTIVITIES OF RELIANCE INFOCOMM Ltd.

In the present time, research & development activities are very necessary for every business especially for service providing business organisations. Reliance Infocomm is also a survey-providing organisation in the field of IT. It has built solid foundation of providing quality services to domestic as well as industrial consumers. The researcher has appraised the research & development activities of Reliance Infocomm Ltd.

Research & Development (R&D) activities are an integral part of Reliance's overall operations and are directed towards the corporate objective of growth and excellence. FY 2002-03 saw a surge in Reliance's R&D efforts across various manufacturing sites and research centers.

The R&D center at Hazira achieved major breakthrough in polymers. These initiatives have culminated in five international patents, which are in the process of being filed.

- Catalysts processes and performance improvements for PP
- Process development of inorganic support for polyolefin catalysts.
- Development of functional aliphatic donors for polyolefin’s catalysts
- Low cost antipolymerant for naphtha cracking

Reliance continues to pursue various programmes at National Chemical Laboratory (NCL), Pune under the Research Alliance agreement (RAA). One of the programs designed to develop nucleating agents for polypropylene from bio-diversified resources in India has resulted in 3 joint (RIL - NCL/CSIR) patents.
Reliance has recently entered into an agreement under the new millennium Indian Technology Leadership Initiative (NMITLI) along with the Council of Scientific & Industrial Research (CSIR) for developing breakthrough technology in key areas from laboratory to commercial scale. Reliance will be offered the first right to the IPR for commercial development. The key areas are:

- Fictionalisation of alkyynes involving acetic acid and ethylene from enhance.
- Detergent alcohol from CI 1-13 alkenes
- Lactic acid and lactic-based polymersmatirals from renewable resources.

GROWTH IS INNOVATION

Our R&D efforts in Polyesters and Polymers help us in developing new and improved products.

OUR RESEARCH AND DEVELOPMENT PROGRAMMES.

The Reliance Technology Center (RTC) was the hub of all polyester R&D activities. Some of the highlights are:

- Process troubleshooting and development of NG-3 technology to support commercial demonstration of technology at Hazira.
- Development of differentiated grades of PET for novel applications.
- Development and commercial demonstration of Recron 'Stretch' for comfort stretch applications, and of Recron 'Mircell', with ultra micro denier yarn.
- Demonstration of Dyefast polyester fibers.
- Process development and plant demonstration of super high tenacity fibers.

R&D efforts in the polymer sector continued towards new and improved product development, catalyst chemical-additive development and process improvement in addition to IPR.

During the year, a US Patent on a polypropylene catalyst system was granted to Reliance. This was a notable milestone for the Hazira R&D center. Two more international patents are being filed as PCT Application in the research area of polyolefin catalyst and high performance stereo regulating donors for polypropylene. A breakthrough was achieved in the development of next generation RELCAT 100 X and RELDONOR Technology for Polypropylene. RELCAT 100 X technology involves the development of a high generation morphologically controlled catalyst and improved products.

RELDONOR Technology has provided the opportunity to improve catalyst performance as well as product characteristics without bringing change into the solid catalyst technology.

Reliance continued to sponsor and participate in various research programmes at premier institutes in India and abroad including Polymer Institute, Brno, Czech Republic and IIT Bombay.
July 07, 2005

Mukesh Ambani, CMD, Reliance Industry Ltd, who has been leading the Reliance Life Sciences (RLS) initiative since 2001, will continue to drive it post the new alignment of businesses at Reliance Group.

June 18 was days of rejoice for over three million shareholders of the Reliance Group. Kokilaben Ambani, wife of late Dhirubhai Ambani, founder chairman of Reliance Industries, one of the leading business conglomerates in India with total turnover of Rs 73,164 crore for the year ending March 31, 2005 amicably resolved the seven-month ownership feud between her two sons Mukesh and Anil by issuing a statement. As per the settlement formula, Mukesh got complete control over the oil refining and gas firm Reliance Industries and the petrochemicals business Indian Petrochemicals Corporation Ltd (IPCL). Anil, on the other hand, would manage the power utility Reliance Energy, the finance firm Reliance Capital and telecom services major Reliance Infocomm.

However Kokilaben’s statement contained no information of the some of the other group companies including Reliance Life Sciences Pvt Ltd, the biotechnology venture of the Reliance Group which is still in the process of profit making. When contacted, Reliance spokesperson confirmed that Mukesh Ambani, chairman and managing director of Reliance Industry Ltd who has been driving and guiding the Reliance Life Sciences since 2001, still holds the control on the life sciences initiative of the Group.

The Reliance Group saw a major opportunity emerging in the field of biotechnology in the 21st century. This motivated the creation of RLS with an investment of $5 million in the cell biology facility in 2001 as a new millennium initiative of the Reliance Group.

At RLS the embryonic stem cell work was started in April 2001 as per the guidelines of the Indian Council of Medical Research and the National Institutes of Health, USA. The embryonic stem cell group is also focusing on basic research such as gene discovery, drug discovery and establishment of several transformed cell lines. The RLS’s cell biology research activities are being carried out at Sir Harkishandas Narrotumdas Hospital in Mumbai and Reliance had pumped in Rs 100 crore for its upgradation in 1997.

Reliance Life Sciences joined hands with Thyrocare Technologies, the world’s largest thyroid testing laboratory to offer DNA technology-based genetic testing services across the country. It has created a comprehensive Genetic Center as part of its cell biology group. The Reliance Group will be investing about $25 million in cell biology research that focuses on stem cells and tissue engineering. This covers embryonic stem cells, haematopoietic stem cells, skin cells, tissue engineering, genetics and molecular diagnostics.
Reliance Life Sciences, a closely held company, is now in the process of setting up its Cord Blood Repository (CBR) and plans to grow the repository to around 30,000 units over the next two-three years. The CBR is part of the cell biology group and has to date, collect, test and store the cord blood. The stem cell-enriched CBR initiative of RLS is an investment for the future. The RLS is expected to complete the HLA (Human Leukocyte Antigen) typing of the blood in the next eight months and would be followed by animal testing and matching of donor-receiver.

The RLS will soon move out of its makeshift base from the city hospital to its own campus in Navi Mumbai, with an eye on scaling up - the critical mass being 10,000 stem cell units of the company can join a global network of cord blood repositories. Kvaerner, the international Engineering and Construction Group, based in the US have already been developing the life sciences complex for Reliance since 2002. The RLS campus, which is a fast track project, will include R&D laboratories, a cGMP pilot plant, animal environment and a green house. It has developed specific target oriented, efficient screen systems - both biological as well as chemical to aim at leading optimisation through iterative medicinal and automated synthetic methods. Besides stem cell research, Reliance Life Sciences is developing business opportunities in the domains of medical biotechnology, plant biotechnology, industrial biotechnology, contract research and clinical trials. RLS' facility at Jamnagar primarily focuses on plant biotechnology projects where modern farming methods are being tried in arid areas. In addition to this, Jamnagar also has facilities for carrying out industrial biotechnology research by addressing the biopolymers, bio fuels and bioprocess development opportunities.

Reliance Life Sciences that filed about nine patents in India, according to a study done by the Patent Facility Centre (PFC), under the Technology Information Forecasting and Assessment Council, has been offering few products and services in both medical and plant biotechnology space. Besides RLS offers services in molecular diagnostics and genetic testing under Rellx brand to institutions.

3 TARIFF PLANS ARE NOT COMFORTABLE & CUSTOMER ORIENTED:

While going through my research I found that these companies (BSNL & Reliance) introduces tariff plans that are not customer oriented. Their plans bound the customers and customers are not aware it. When the customers want to surrender it, Reliance ask them to pay the remaining amount of the hand set (example- under the 501 plan) they always introduce attractive schemes which promote will some facility their products in the market such as they gave free outgoing calls to their own customers they make fool of customers by giving life-time free incoming plan applying to condition that they have to recharge the no. after every six months.
4 LACK OF PROMOTION IN RURAL AREAS:

In our country most of the population is residing in the rural areas, which need some mode of communication that must for them to have contact, but these companies don’t have any scheme for rural areas. There is a big market for them but they are not showing any interest. Their mode of promotion is by DD but most of the villages don’t have electricity to this activity doesn’t suit. They can reach them by face-to-face contact. This will take time, money and manpower.

Large population of India lives in rural areas. The promotional methods adopted by BSNL & Reliance is not as per needs of the rural segment. Their level of Education, old traditional & culture require special type of promotions, but these companies don’t come up to their expectation.

5 NO PROPER INTIMATION OF NEW PLANS:

These companies required introduce new plans, which are not intimated to the customers. For example- recently Reliance introduced one scheme in which customers shall buy own handset and get the reliance connection, but this plan was not promoted and handled by customers known. BSNL promoted their plan by media but the employees don’t give any proper information to the clients. This way they lose a big No. of target customers.

6 BSNL DOES NOT SPEND A GOOD AMOUNT OF REVENUE ON PROMOTION ACTIVITIES BEING A GOVT. UNDERTAKING:

Though BSNL have maximum revenue maker, but still they don’t spend no promotional activities they give adds in newspaper & TV, but very rare hand it reach to the target customers. They open many franchisees also but customer doesn’t aware it. They don’t even promote any franchisees hand. The promotion includes the advertising sales promotion & personal selling. BSNL doesn’t have impressive advertisement either in newspaper or in TV.

7 RELIANCE INFOCOMM SPENDS EVERY YEAR A GOOD AMOUNT OF REVENUES ON PROMOTIONAL ACTIVITIES. THE PROMOTION INCLUDES THE ADVERTISING SALES PROMOTION & PERSONAL SELLING:

Reliance Infocomm hire famous personalities for their advertising they also hire good advertising agencies gives regular adds in leading and local newspaper & TV. Nukad natak is one of the good promotional activities introduce by reliance Infocomm.

8 IMPROPER CHANNELS OF DISTRIBUTION OF BSNL:

BSNL has opened many franchisees in most of the locality but the customers are not aware of them. Even the some body came to known about it still they can’t avail all
facilities from the franchisees doesn’t have the update information which causes a great loss to BSNL franchisees can’t handled the daily customers complain & customers have to go the main head office for solution their problems. Franchisees are mainly located in such places that are not easily reachable for the client.

6.3 SUGGESTIONS

On the basis of my observations data and information, I submit certain useful recommendations to make Infocomm system of BSNL & Reliance very effective and customer centric. Some of the worthy suggestions are given as under:

- Reliance Infocomm doesn’t have its own network. Since it uses BSNL network. It will give strength & wide coverage to Reliance Infocomm services.
- BSNL network is not up to the mark at providing service to wide area and improving quality of service.
- It is suggested that BSNL & Reliance Infocomm should develop innovative Infocomm services with in depth research development and continue improvement in the quality of services.
- They should resort to TQM philosophy with good corporate governance and transparency in its policies, programmes and strategies.
- It is further suggested that Reliance Infocomm, which enjoys highest market share, should diversify its services and further diversify the models and the systems as suggested by the respondent.
- The researcher suggests that Reliance Infocomm should develop its competitive strength to meet the challenges and threats of global corporations in the Infocomm business.
- It is suggested that Reliance Infocomm should develop relationship marketing so as to know the real needs of the customers & should incorporate customer’s suggestions.
- It is further suggested that Reliance Infocomm should short analysis, which will help Reliance Infocomm to understand its real strengths and shortcomings.
- The researcher further suggests that Reliance Infocomm should develop benchmarks as standards for providing better customer services.
- It is further suggested there should be continuous revision in the pricing of Infocomm services.
- It is again suggested that they should take into consideration environmental factors in providing consumer services and determining prices.
It is again recommended that Reliance Infocomm should develop quality circles in different functional areas of the organisations so the quality may be improved and suggestion should be obtained from the people.

Finally, the researcher would like to suggest that Reliance Infocomm should develop product research, project planning, strategic planning and Research & Development activities, so that Reliance Infocomm would come up to the global culture and should compete with its competitors internally.

The researcher hopes that marketing people of BSNL & Reliance Infocomm will follow the suggestion given above. They would go a long way to improve the Infocomm services being provided by the organisation.

Both BSNL & Reliance should penetrate the market by entering to rural areas & interiors of the country. They should do so by promoting through local advertising areas like mails, hat bazaar, TV projectors etc. Regional proverbs & languages should be used while promoting the service.

The components & instruments provided by the Reliance are must for every customer rather he likes or dislikes. It is suggested that the instrument may be allowed of his choice & get activated from the company.

The all collection system of BSNL should be made customer-oriented. There should be made there should be as many collection counters as possible with close proximately of customers.

There should be single window system to satisfy query of customer care systems.

The customer care centers should be more effective. So the customers may have the loyalty with the BSNL.

In other to attract exiting customers prosperities customers it is suggested that the ads given by BSNL should be more attractive spread over the whole page of the diary.

The BSNL staff should be more corporative & friendly to the customers’ do that the customers may feel satisfy of BSNL’s services.

Strong R&D infrastructure is very vital for promoting a vibrant and strong tele.com hardware sector in the country. Telecom R&D also needs to be strengthened in order to have indigenous telecommunication technology and evolve national standards. R&D efforts would have to be diversified besides technology development. It should focus on services systems processes and markets this would ensure a user relevant orientation to R & D activities. Applications research also needs to be encouraged so that the research projects become commercially viable and products appropriate for deployment in local conditions are developed R & D efforts in telecommunications are envisaged to be more effective if these are multi disciplinary in character. The telecom sector involves some of the most sophisticated concepts in economics social science & and management among other disciplines.
- BSNL should give rewards to their franchises according to their revenues. This will fetch more customers.
- Each franchise of BSNL should be given much power to handle customer's complains individually on the spot so that they need not come to main office.