CHAPTER - V

SUMMARY AND FINDINGS
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CHAPTER - I

The communication system comprises posts and Telegraphs, telecommunication system, Broad costing, television and information services. By providing necessary information about the markets the communication system helps to bring buyers and sellers together effectively and help to accelerate the growth of the economy.

Of late, the information technologies have started dominating the decision making and supporting process which are fantastically influenced by the quality of service offered by the telecom department managed and controlled by an autonomous Board. The users at large are benefited and the business houses can’t run their business efficiently failing the co-operation of the telecom services.

CELL PHONES

In today’s world, most people communicate through the use of cellular phones. Cell phone, a wireless communication instrument, is popular throughout the world in general and more particular among Indian users.
1843- A skilled analytical chemist by the name of Michael Faraday began exhaustive research into whether space could conduct electricity.

1865- Dr. Mahlon Loomis of Virginia, a dentist, may have been the first person to communicate through wireless via the atmosphere.

1973- Dr Martin Cooper, is considered the inventor of the first portable handset.

1973- Dr. Cooper setup a base station in New York with the first working prototype of a cellular telephone, the Motorola Dyna-Tac.

1977- Cell phones go public. Public cell phone testing began. The city of Chicago was where the first trials began with 2000 customers.

1988- this year changed many of the technologies that had become typical in the past. The Cellular Technology Industry Association (CTIA) was developed to lay down practical goals for cellular phone providers.

In spite of the unbelievable demand, it took cellular phone service 37 years total to become commercially accessible in the US.
SIGNIFICANCE OF THE STUDY

Today, service industry is a "Sun Rise sector of the Economy" and it is the fastest growing sector today and the future belongs to this sector. This sector provides more than 50 percent of the jobs and 40 percent export is from this sector. The share of service sector to the GDP amount of 42 percent.

Due to New Telecom Policy, 1999 many private sector companies entered as the provider of both in Land-line and wireless communication systems. In addition to BSNL and MTNL, Air Tel, Hutch, Tata Mobile, BPL-Mobile at national level and Aircel at region level were given license to offer the telecom service.

Under these circumstances, it will be interesting to examine users behaviour towards a particular company because different strategies are adopted by different cell phone connection companies.

OBJECTIVES OF THE STUDY

The specific objectives of the presently study are:

(i). to study the growth and development of Telecommunication Services in India.

(ii). to examine the common features and the distinctive features which are found in different type of cell connections.

(iii). to examine empirically the behaviour of buyers of cell phone connections towards different operators.
(iv). to find out the nature of association between elected demographic variables and their brand choice.

(v). to make suggestion if any, for introducing a new strategy (or) withdrawing existing strategies (or) altering the existing strategies to attract more users.

METHODOLOGY

The Sample

Namakkal district is selected as the area for this study. Forty sample each for four revenue taluks was fixed. Using convenient sampling 40 users in each of the revenue taluks of the Namakkal district were selected. Out of the questionnaires issued, a total of 154 were selected and out of these 14 questionnaires has to be discarded due to in-complete answering and other reasons.

THE QUESTIONNAIRE

A two part questionnaire has been developed to assess the users choice, purpose and preference of cell phone connections.

Part I – Multiple choice type of questions were asked to study the users behaviour in terms of purpose, basis, information source, perception on operators etc.,

Part II – Personal data regarding Age, Education, Occupation and income were collected for classification purposes.
FRAME WORK OF ANALYSIS

For classification of cell phone users the simple percentage analysis is used. Chi-Square test was applied for examining the association and difference between telecom operator, purpose, basis and socio-economic variables of cell phone users.

LIMITATIONS OF THE STUDY

Besides the usual limitations of any behavioural and attitudinal study, the present study posed the following limitations.

(i). The study is based on a sample of 140 cell phone users. A broad generalization of the results may not be valid for the whole state (or) country.

(ii). The preference of Telecom Operator is also affected by family, social group, situation etc., which are not given much importance in the present study.

(iii). The findings of the study are based on the information provided by the users.

CHAPTER II

OVERVIEW OF TELECOMMUNICATIONS SERVICES

Introduction

"Aharnish Sevamhe"- A slogan beautifying the logo needs to be practiced. Non-stop, day-and night and Round the clock services promised but interrupted and stop-generating-services offered.
Sophistication resulting into poor transmission and this much even in an age of info-tech turns everything paradoxical.

**TELECOMMUNICATIONS MARKETING – A CONCEPTUAL FRAMEWORK**

Telecommunication services play an incremental role in the multi-dimensional development activities. A well functioning telecommunications network is an essential component of economic infrastructure. The application of modern marketing principles in the telecommunication services would make ways for the generation of profits and at the same time would also make the services affordable to the users at large. The telecommunication organizations are supposed to market the services in such a way that a high level of efficiency generates a high level of profit.

**The Product Mix**

With the development of sophisticated communication technologies, we find a big change in the service profile of telecommunication organizations. On the one hand the telecom organizations feel that the services are quite satisfactory while on the other hand we find increasing cases of dissatisfaction among the users. This makes it essential that we make sincere efforts to improve the quality of services.
THE COMMUNICATION SYSTEM IN INDIA

Postal System in India

Since 1950-51, the postal network has been expanded throughout the country, and in recent years, with special emphasis on the rural, hilly and remote tribal areas. With more than 1.5 lakh post of offices, the postal network in India is the largest in the whole world.

At present, it is estimated that there are approximately 1,10,000 Gram Panchayat villages which do not have a post office.

In recent years, there has been healthy growth in many lines of postal activity, such as speed post traffic, postal life insurance which now covers over 2 million policies with a sum assured of nearly Rs.5,000 crores, extension of postal life insurance and Post Office Savings Banks to rural areas, etc.,

A worrying aspect about the postal department is that it is working under continuous deficit—it was nearly Rs.340 crore during 1994-95. It can be made commercially viable with a careful planning but this is lacking at the top level of postal bureaucracy.
Indian Telegraphs

Indian telegraphs is one of the oldest Government owned public utility organization in the world. The number of telegraph offices has increased from 8,200 in 1951 to over 30,000 now.

Telecommunications

There has been a phenomenal growth in the telecommunication sector after 1995. The telecommunications network of the public sector (BSNL and MTNL) is one of the largest telecommunication network in Asia with a capacity of 50 million lines and over 40 million working connections comprising 35,510 telephone connections has been increasing steadily from about 10 per cent in 1988-89 to 30 per cent in 1999-2000 and 17 per cent during 2001-2002. The number of new telephone connections provided during 2003-2004 alone was 22 million.- which was equal to the total number of phones installed as of 1999.

New Telecom Policy, 1999

There was considerable confusion in the provision and management of telecom infrastructure and telecom services. The Department of Telecom Services (DTS) and Department of Telecom Operations (DTO) were two service providing departments. The Mahanager Telephone Nigam Limited (MTNL) and Bharat Sanchar Nigam Ltd (BSNL) were two public sector companies providing basic telephonic services in Delhi and Mumbai (MTNL) and in the rest of
country (BSNL). The (BSNL) was set up in October 2000 under the new Telecom Policy, 1999 to provide all the services provided by DTS and DTO.

A public Sector company "Bharat Sanchar Nigam Ltd." (BSNL) has now taken up all service providing functions of these two Departments with effect from October 1, 2000. The company has an authorized capital base of Rs.10,000 crore with a paid up capital of Rs.5,000 crore. This initiative is expected to provide a level playing field in all areas of telecom services between government operators and private operators.

The telecommunication network of the public sector (BSNL and MTNL) is one of the largest telecom networks in Asia. It has a capacity of 35 million lines and 28.4 million working connections comprising 28,936 telephone exchanges in the country as on October 31, 2000. During 1999-2000, the switching capacity witnessed an increase of 40 percent over the proceeding year. Approximately, 4.9 million new connections provided in 1999-2000.

The value of equipment production increased to Rs.10,760 crore in 1999-2000 from Rs.10,000 crore in 1998-99. The telecom export have also increased to Rs.3,747 crore in 1999-2000 from Rs.2,909 crore in 1998-99.
Eight licences for Cellular Mobile Telephone Service in the four metro cities were issued to eight companies in November 1994. Since December 1995, 34 licenses for 18 territorial telecom circles were also issued to 14 companies. Services have been started in all the metro cities and select cities in 18 Telecom Circles.

There were about 2.6 million cellular subscribers in the country as on September 30, 2000. The service is now available in 648 cities/towns in the country. The number of cellular subscribers has almost doubled during the preceding year, i.e., from 1.4 million as September 30, 1999 to 2.6 million as on September 30, 2000. Thus, the number of cellular mobile subscribers in the country has been growing at a very rapid pace.

According to the New Telecom Policy (NTP) 1999, the Government has opened the National Long Distance Service to private operators without any restriction on the number of operators with effect from August 13, 2000.

Recent Developments in the Telecom Sector

- A revenue sharing in place of existing fixed license fee introduced for both basic and cellular service operators.
- A fourth cellular operator in all the circles would be permitted.
- Additional basis service operator would also be permitted.
- Licenses are to be issued to ISPs for setting up of submarine
cable landing station for international gateways for internet.

- ISPs would be given approval for setting up of international gateways for internet using satellite as a medium.
- National long distance service opened up for unrestricted entry.
- Two categories of infrastructure providers, viz., infrastructure providers category II to provide end to-end hand width and infrastructure provider, category-I to provide dark fibre, right of way, towers, duct, space, etc., have been allowed.
- Termination of monopoly of VSNL for International Long Distance (ILD) service has been preponed to March 31, 2002 from March 31, 2004.
- Limited mobility to fixed service providers in the form of Wireless in Local Loop (WILL).

BSNL

Introduction

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.
BSNL has managed to shoulder these responsibilities remarkably and deftly. Today with over 45 million line capacity, 99.9% of its exchanges digital, nation wide Network management & surveillance system (NMSS) to control telecom traffic and over 4,00,000 route kms of OFC network, Bharat Sanchar Nigam Ltd is a name to reckon with in the world of connectivity. Along with its vast customer base, BSNL's financial and asset bases too are vast and strong. Consider the figures, as they speak volumes on BSNL's standing:

AIRTEL

Bharti Tele-Ventures

Bharti Tele-Ventures Limited, a part of Bharti Enterprises, in India's leading provider of telecommunications services. The businesses at Bharti Tele-Ventures have been structured into two main strategic business groups-the Mobility Leaders business group and the Infotel Leaders business group.

Highlights

➤ Airtel won India's most Customer Responsive Telecom Company Award

➤ Airtel to launch 3G in Seychelles

➤ Bharti brings the next generation cable system SEA-ME-WE-4 to India
Bharti has been adjudged as India’s second best employer by Hewitt Associates.

Bharti, India’s leading telecom conglomerate, declared country’s best-managed company by Asiamoney.

Sunill Bharti Mittal, Chairman & Management Director, Bharti Enterprises, is the Ernst & young Entrepreneur of the year 2004. Paul J Osting & NR Narayan Murthy award him the accolade.

RELIANCE

Reliance Group

The Reliance Group founded by Dhirubhai H. Ambani (1932-2002) is India's largest business house with total revenues of over Rs 99,000 crore (US$ 22.6 billion), cash profit of Rs 12,500 crore (US$ 2.8 billion), net profit of Rs 6,200 crore (US$ 1.4 billion) and exports of Rs 15,900 crore (US$ 3.6 billion).

Reliance -infocomm

Reliance Infocomm is the outcome of the late visionary Dhirubhai Ambani’s (1932-2002) dream to herald a digital revolution in India by bringing affordable means of information and communication to the doorsteps of India’s vast population.

Working at breakneck speed, from late 1999 to 2002 Reliance Infocomm built the backbone for a digital India - 60,000 kilometres of fibre optic backbone, crisscrossing the entire country. The
Reliance Infocomm pan-India network was commissioned on December 28, 2002, the 70th - birth anniversary of Dhirubhai. This day also marked his first birth anniversary after his demise July - 6, 2002.

**BPL**

**Introduction**

BPL Mobile is committed to business leadership in providing world class technology services and solutions, by focusing on People, Customers, Technology, and passionately driving Excellence throughout the organization thereby creating Value.

Having started its services in 1995, BPL Mobile operates in Mumbai, Maharashtra, Goa, Kerala, Tamil Nadu and Pondicherry - with a network spanning across 209 cities currently.

**Today, BPL Mobile, India's premier mobile phone service provider serves over 2.5 million happy and satisfied subscribers across all our markets**

**TATA INDICOM**

Tata Tele-services is a part of the INR 76,930 Crore (U$$17.10 billion) Tata Group, that has over 90 companies, over 22,000 employees and more than 2 million shareholders. With and investment of over INR 9,000 (U$$2 billion) in Telecom, the Group has a formidable presence across the telecom value chain.
Tata Tele-services spearheads the Group’s presence in the telecom sector. Incorporated in 1996, Tata tele-services was the first to launch CDMA mobile services in India with the Andhra Pradesh circle.

Starting with the major acquisition of Hughes Tele.com (India) Limited [now renamed Tata Tele-services (Maharashtra) Limited] in December 2002, the company has swung into expansion mode.

AIRCEL

Aircel Cellular is a part of the Sterling group. Aircel Cellular began its commercial operations in April 1999 and in a very short span has achieved a huge subscriber base of over 19.5 Lakh. Aircel has coverage over 362 towns in Tamil Nadu. Advanced Technology, strong customer-oriented strategies and excellent back-end support, have contributed to Aircel being one of the top Cellular Service Provider in the country today.

CHAPTER – IV

ANALYSIS OF PERCEPTION AND USAGE OF CELL PHONES

Kind of Cell Phone connection

At present, the cell phone companies in India are providing two kinds of connections i.e.,

(i). Pre-paid and

(ii). Post-paid
The pre-paid connections are provided to consumers by charging a fixed non-refundable amount as “Activation Charges”. Minimum Rs. 99 and the maximum of Rs.200 in charged by the companies for new connection.

54 percent of respondents are having prepaid Connection. 39 percent of respondents are having Post-paid Connections and 7 percent of respondents are having both Connections.

**Name of the company**

In addition to BSNL many private sector companies were given licence to enter the Telecommunication market.

27 percent of the respondents preferred BSNL connections and 23 percent preferred Aircel connections. As ‘Aircel’ company is functioning in Tamil Nadu area only, it is able to secure the 2\textsuperscript{nd} place in the consumers preference.

**Number of Shops visited**

It is noted that with regard to cell phone connection the number of consumers are exactly divided into two equal parts i.e., the number of respondents who visited ‘None” (or) only one shop is equal to the number of respondents who visited “More than one Shop”.

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41 percent of the respondents visited only one shop, 31 percent of the respondents visited more than two dealers. Only 9 percent of the respondents didn't visit any shop/dealer and made straight away purchase the connection from the Agency which they think 'Best'.

**Duration of Use**

57 percentage of the respondents were using cell phone connection of for the past one year and above. 32 percentage of the respondents are using this particular facility only for a period less that 1 year. It shows that there is a sudden spurt in the growth of cell phone connections in a short span of one year due to new schemes offered, advancement technology in the communication sector.

**Number of Brands Considered**

The 'Brand' is used here to the name of the provider of such service. As given earlier BSNL, Airtel, Aircell, BPL-Mobile, Tata indicom and Hutch are in the market as suppliers.

34 percent of the respondents took final choice by considering only one brand and the same percentage of the respondents considered two brands before making a final choice. So majority of the respondents (68%) considered only one brand and two brands. Nearly 1/3rd of the respondents considered more than three brands. It is to be noted that the view that Indian consumers are more concissions in confirmed to a certain extent by this result.
Duration of Time Taken

There is always a time gap between the 'decision to buy' and the 'actual purchase' of goods/services. The duration may be higher in case goods which involve heavy amount like purchase of a car, Two-wheeler etc.,

36 percent of the respondents took 3-6 weeks and 24 percent of the respondents took 1-3 weeks to subscribe cell phone connections. So, 60 percent of the respondents took 1-6 weeks times. As the investment in comparatively low [cell phone cost Rs.2000/- (mini); connection charges Rs.99/- (min)] the decision time is very short., Further only 17 percent of the respondent took more than 6 weeks time for actual purchase of this service.

Sources of Information

'Information search' is an integral part in the decision making process by a consumer. Information about the availability of goods, its features, price, discount etc are collected by consumers from various sources.

47 percent of the respondents know about Cell Phone from their Friends and Neighbours and 17 percent of the respondents came to know from the Television and Newspapers. It is noted that majority of the respondents (47 percent) came to know about the service from their friends/neighbours. The influence of 'Social
Group' (or) 'Beer group' is more when compare to other sources in cell phone connection market. Though television reached the entire Indian population it had only a lower dependent source.

**Personal Role in Purchase**

Some of the goods (or) services are purchased not only for personal use of a consumer but for the entire family.

40 percent of the respondents accepted that their decision is of "their own" i.e., they subscribed the connection without consulting any family members. 27 percent of the respondents accepted that some one in the family helped (or) influenced in subscribing cell phone connection. It is a common opinion that a 'Cell Phone' is a personal effect and there is little scope for the influence from others.

**Facilities Considered**

The facilities differ in a pre-paid from that of a post-paid connection.

**(A) PRE-PAID CONNECTION**

Pre-paid connection attracted many consumer due to it's distinct features. Among others 'No deposits' is the most attractive feature for the selected respondents in their cell connection. As the initial deposit which was collected from Rs.500 to Rs.1000 by the operators, the respondents felt that it is an additional burden to their monthly budget.
11 percent of the respondents preferred "No deposit" as an important factor while selecting pre-paid connection and "No coverage/Town problem" accounts for 10 percent. In addition to the above two, Easy to control bill", SMS based information', and '24 hours recharge facilities were also considered in getting cell connections. As 50 percent of the respondents considered these five features, it can be concluded that much importance in given on these features by the consumers in subscribing pre-paid cell phone connections.

(B) POST-PAID CONNECTION

Under Post-paid scheme a fixed monthly rent is charged starting from Rs.100 to Rs.599 with add-on Facility.

10 percent of the respondents considered availability of attractive schemes and easy connection as important features. Overall 'convenient to use' SMS facility at lower rates, and SMS information service account for 30 percent of the respondents.

Change of Cell connection

The consumers are free to change their cell connection from post-paid to pre-paid and vice-versa and from BSNL to any other cell company operators and vice-versa.

60 percent of the respondents didn't change their cell connections and only 40 percent have changed their cell connection.
Reasons for Change

Due to severe competition, the telecom operators are compelled to offer more benefits in terms of quality, cost etc.,

26 percent of respondents, changed their connection due to net work problem and 23 percent due to high tariff Rate/min. Though different type of schemes are announced by the operators, 14 percent of the respondents disconnected due to the non-availability of attractive schemes with their operators.

Ranking of Telecom operators

A careful analysis of their advertisements the following four features are more dominant related this particular service.

(i). Wide Network Coverage
(ii). Talk Time Value
(iii). Call Rate/min
(iv) Value-added Services

RESULTS OF RANKING OF SERVICE PROVIDERS

The ‘BSNL’ enjoys the first rank in providing ‘Best Net Work coverage’. As an established public sector under taking it was possible. However it was ranked second as for as the call Rate/min and providing value added service compared to other operators. It is noted that the Aircel, the local brand (Tamil Nadu only) secured first tank in terms of Talk time value, call Rate/mini and value
added service. The late entry of national operators like Airtel, Hutch and Reliance gave way for the Aircel Company to secure first rank in all the three aspects. Though the Reliance entered the Tamil Nadu state in the earlier years of 2000, the confusion over its post-paid system created a side-line marketing among consumers. Now they are concentrating on the pre-paid type of connections than the post-paid. It is learnt that the national players have gained considerable share in Tamil Nadu over-taking the local brand 'Aircel.'

DEMOGRAPHIC VARIABLES

AGE

36 percent of the respondents are in the age group of 26-35 and 31 percent are in below 25 years. So, 67 percent respondents are below 35 years. It is interesting to note that none in the age group of above 55 years.

EDUCATION

41 percent of the respondents are graduates and high school level education is 21 percent. Even respondents with elementary education (7 percent) had purchase cell phone connections.

MONTHLY INCOME

An individual's income plays a key role in deciding what to buy? When to Buy? Etc.,
43 percent of the respondents are earning an income of Rs.3000 – Rs.5000 per month and 34 percent are Rs.5000-Rs.10,000. It can be assumed that due to change of Indian life-style even the persons with a monthly income of less than Rs.10,000 are able to subscribe cell phone connections. It become an essential instead of luxury.

**OCCUPATION / PROFESSION**

People belonging to all occupations subscribed the cell phone connection. However, 21 percent of the respondents belong to “Business” and 13 percent “Agriculturist”. Even clerical cadere people both in private and government organization had subscribed cell phone connection. It may be said that due to its utility, the cell phone connection attracted every one in the Indian Society.

**Association of Demographic Variable and Cell Phone Connection**

**Age**

There is an association between Age and the brand of Telecom Operators preferred. It is understood that a particular age group preferred a particular Telecom Operator. However, it is not possible to conclude which Age group preferred which Telecom operator as it required further statistical analysis.
Education

There is an association between Education and brand preferred. It is understood that a particular education level group preferred a particular brand of cell phone connection.

Monthly Income

i.e., there is an association between income and the company preferred for cell phone connection. It is understood that a particular income group preferred a particular brand. Further analysis may reveal the income group and its most preferred brand of the Telecom operator.

Occupation

There is an association between occupation and brand preference of cell phone connection. It is understood that there is a strong association and a particular occupational groups of consumers preferred only a particular brand of cell phone connection.