MARKET RESEARCH OF TELECOMMUNICATION IN NEPAL

(Based on NTC, UTL and Mero Mobile)

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RECOMMENDATION

This is to certify that the thesis

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Entitled:

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has been prepared as approved by this Department in the prescribed format of the Faculty of Management. This thesis is forwarded for examination.

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VIVA-VOCE SHEET

We have conducted the viva –voce of the thesis presented

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And found the thesis to be the original work of the student and written according to the prescribed format. We recommend the thesis to be accepted as partial fulfillment of the requirement for the degree of

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Viva-Voce Committee

Head, Research Department	…………………….………
Member (Thesis Supervisor)	…..………………………..
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DECLARATION

I hereby declare that the work reported in this thesis entitled "**Market Research of Telecommunication in Nepal (Based on NTC, UTL and Mero Mobile)**" submitted to Office of the Dean, Faculty of Management, Tribhuvan University, is my original work done in the form of partial fulfillment of the requirement for the degree of Master of Business Studies (MBS) under the supervision of **Kailash P. Amatya** of Shanker Dev Campus, T.U.

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ABBREVIATIONS

&	:	And
3G	:	Third Generation
A.D	:	Anno Domini
ARUP	:	Average Revenue per User
B.S	:	Bikram Sambat
CDMA	:	Code Division Multiple Access
DSAT	:	District Satelite
EDR	:	Eastern Development Region
F.Y	:	Fiscal Year
GSM	:	Global System for Mobile Communication
ICT	:	International Communicational Technology
ITU	:	International Telecommunication Union
LTD.	:	Limited
MMS	:	Multimedia Messaging Services
MTNL	:	Mahanagar Telephone Nigam Limited
NTA	:	Nepal Telecommunication Authority
NTC	:	Nepal Telecom
PCC	:	Profit Planning and Control
PCO	:	Public Communication Office
PVT.	:	Private
RSAT	:	Regenerative Satellite Access Terminals
S.N	:	Serial Number
SMS	:	Short Message Service
TCIL	:	Telecommunications Consultants India
Limited		
UTL	:	United Telecom Limited
VSNL	:	Videsh Sanchar Nigam Limited
WCDMA	:	Wideband Code Division Multiple Access
WLL	:	Wireless Local Loop

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CHAPTER - I

INTRODUCTION

1.2 **General Background of Telecommunication Services**

With the unprecedented innovations in the field of telecommunication services and rapid telecommunications development in the world, it has become necessary to bring with the same pace development and expansion in this sector in Nepal also. Keeping in harmony with the currently evolving new technological developments, the emerging craze for globalization and liberalization of market economy concept, it is felt that the resources and efforts of Nepal government alone cannot fulfill the steadily increasing demand of the telecommunication services in a competitive environment. Even though the private sector entrepreneurs are interested in investing in the novel sectors, flow of private sector capital in productive areas could not be made effective due to unfavorable environment and lack of opportunities. Taking this scenario into account, the National Communication Policy 1992 envisaged the concept of encouraging the private sector participation for providing telecommunication services to the public and to assist to the extent possible as is deemed necessary in an easily available, simple and well planned manner for the development, expansion and operation of this sector inside the kingdom of Nepal as well as abroad.

1.1.1 Establishment of Nepal Telecommunications Authority

With this concept, using liberalization policy and involving the private sector in a competitive environment for the development and expansion of telecommunication sector in Nepal, His Majesty's Government of Nepal's (cabinet’s) decision dated December 25, 1995 has initiated the involvement of the private sector in the development of the telecommunication services. Nepal Telecommunications Authority as an autonomous regulatory body has been established on March 4, 1998 as stipulated within the framework of the Telecommunication Act 1997 and Telecommunication Regulation 1998 to make this work more systematic and regular

1.1.2 Telecom Policy, 2004

In the context of the difficult geographical terrain of Nepal, telecommunications infrastructure is seen as more important than others. New opportunities are being seen in the telecom sector due to the rapid development of technology and continuous changes in the infrastructures. Nepali citizens can also benefit from the worldwide trend in the reduction of tariff in the telecommunications sector. In this context, by utilizing the achievements gained in the telecom sector for maximum benefits and also to use the possibilities and opportunities that might come in future for the greater benefit of the Nepali people, the necessity of an appropriate and up to date policy has been felt. Hence, His Majesty's Government of Nepal has passed the Telecom Policy, 2004 replacing the older Telecom Policy, 1999 by the decision of the cabinet on March 8, 2004.

The monopoly of limited telecom industries, curious and capacity of Nepalese people towards telecom services and a new innovative topic in the field of marketing build keen interest upon the topic. The frequent discussion, team of research project co ordinate bring closer for the development of interest. The development of IT world and curious world make closer with this topic

1.2 Brief Overview of Telecommunications of Nepal

1.2.1 Brief History of Nepal Telecom

In Nepal, operating any form of telecommunication service dates back to 94 years in B.S. 1970. But formally telecom service was provided mainly after the establishment of MOHAN AKASHWANI in B.S. 2005.Later as per the plan formulated in First National Five year plan (2012-2017); Telecommunication

Department was established in B.S.2016. To modernize the telecommunications services and to expand the services, during third five-year plan (2023-2028), Telecommunication Department was converted into Telecommunications Development Board in B.S.2026. After the enactment of Communications Corporation Act 2028, it was formally established as fully owned Government Corporation called Nepal Telecommunications Corporation in B.S. 2032 for the purpose of providing telecommunications services to Nepalese People. After serving the nation for 29 years with great pride and a sense of accomplishment, Nepal Telecommunication Corporation was transformed into Nepal Doorsanchar Company Limited from Baisakh 1, 2061. Nepal Doorsa nchar Company Limited is a company registered under the companies Act 2053. However the company is known to the general public by the brand name Nepal Telecom as registered trademark.

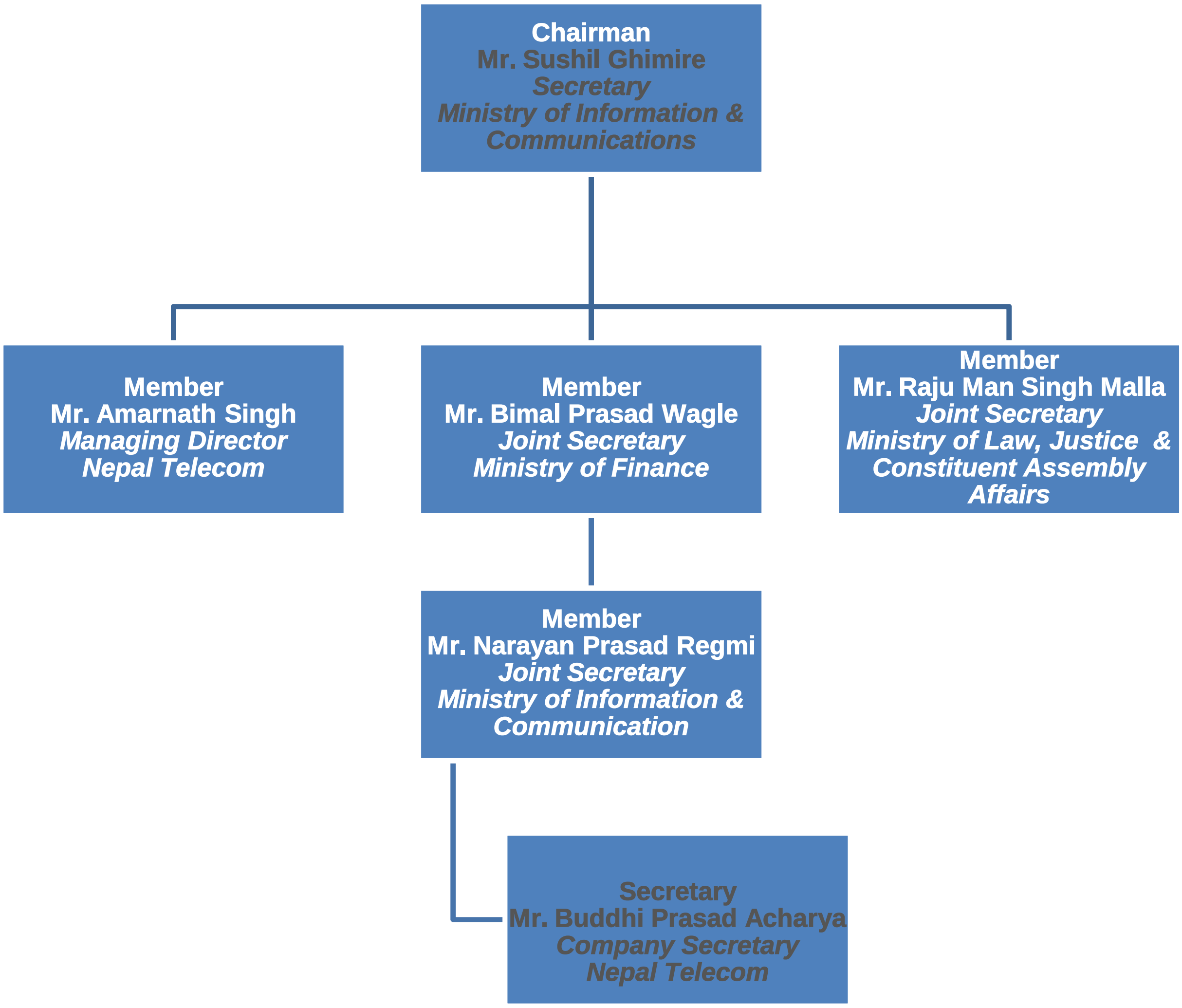
Today NTC has services like NTC Landline; GSM prepaid (**Namaste Mobile**) and post paid, postpaid 3G in Katmandu Valley, CDMA etc. Total subscribers of NTC services, except landline are 3 million.

Board of Directors

NT has managing Directors under the supervision and Control of Board of Directors. There are 6 Members in Board of Directors with 4 years working period and meeting of Board of Director will be held minimum 6 times in a year. The board of Directors chaired by secretary of Ministry of information and communication with 4 members from government, 1 from the Citizen Investment Trust and 2 members From the Telecom to run the affairs of the Organization. The Composition of board of Directors is as Follows:

Figure 1.1

Board of Directors



Source: www.ntc.net.np

NT in the Tenth Five Year Plan

The tenth five years Plan is a highly ambitious and challenging Project targeting to provide telephone connection on demand throughout the country. This project aims to cover 100% of VDCs (excluding the remaining VDCs in Eastern Development Region) and raise substantially telephone penetration to 5.7%. For achieving the targeted penetration throughout the country. Nepal Telecom aims to provide telecom Services also through CDMA system.

A telecom superhighway along the East-west Highway has been established with Grant assistance from Government of India. An alternative satellite network connecting major destinations in the country will also be established through projects like RSAT, DSAT, and VSAT etc. The plan also encompasses the leading value added Services like VMS PCC HCD, AFS Ax DSL, etc. in order to continue satisfying customer’s Need (Annual Report NT 2005/6).

System	Additional Lines	End Capacity
PSTN	350000	800000
GSM Mobile	430000	500000
CDMA	450000	450000

The Main aim or Objective of the NT in the Tenth Five Year Plan

- To attain tendency (basic fixed telephone lines) of 2.7 (this excludes the possible telephone line additional from private operations) by the end of tenth national plan.
- To provide basic telephone facilities in those VDCs of Central, Western, mid Western and Far Western regions, where are no telephone facilities at the end of ninth plan. It is to be noted that eastern region is singled out to be served by private operating company as per NT’s directive (Annual Report of NTC).
- To attain Mobile Tele-density (Number of Mobile telephone per 100 population) of 0.6 (this excludes the possible mobile subscribers of Private operators by the end of tenth plan.
- To provide basic telephone service within six months of demand by any person or institution anywhere in any part of the country including remote rural areas by the end of tenth Plan.
- To create ‘on demand’ telephone distribution situation (which means connection of new lines within 7 days of application) in all major cities and towns of the country by the end of tenth Plan.
- To reduce new services and high technologies to fulfill the demand from urban population, especially to cater trade and industry requirements.

- To give impetus to IT developments in the country by expanding internet network throughout the country.
- To establish brand board backbone links interlinking major cities and towns this will help the country to move towards " information society"

1.2.2 Brief History of Mero Mobile

Spice Nepal Private Ltd., popularly known under its brand name "Ncell", is the first private GSM mobile operator in Nepal. Company was established in 2004 and commercially launched on 17^{th} September 2005.

It is a youth focused brand and the most innovative operator. Its customer base, however, largely remains among those with less spending capacity (Example: students), probably also because of its aggressive customer pull campaigns and easy availability. It has GSM Pre-paid and Post-paid services and operates in 35 districts (out if total 75), covering all the 14 zones of Nepal with almost 2.26 millio subscribers.

Mero Mobile GSM is constantly expanding its coverage, adding new cities and regions to its country-wide network. Powered by our commitment to setting new service standards the GSM network coverage will extend throughout the country gradually. Mero Mobile is providing different kinds of Services to the public like Voice messages, Text messages, Call Forwarding, Call Waiting, Fax Call Conference etc.

Currently, Spice Nepal officially rebranded its brand from Mero Mobile to Ncell from March 12, 2010. Their aim is to promote Ncell in Nepal with top quality to customers with cheap and best technology to compete with other telecommunications of Nepal. Company is eager to make more investment in Nepalese market to expand its network. We should consider it positive symptoms for the development of nation and generation of employment in competitive market. This compels other competitors to enhance their quality in services.

Though Mero mobile has been converted to Ncell but because of its brand name and its popularity in public tongue. I have also used Ncell as a Mero Mobile or Spice Nepal. Here, its name has only changed and its whole data are based on the statistical of Mero Mobile collected 6 months before.

Table 1.1

Network Coverage of Mero Mobile According to Development Region, Zone and District

Development Regions	Zone	Districts
Eastern Development Region	Mechi,Koshi &Sagarmatha	Illam, Jhapa, Morang Sunsari, Saptari, Siraha & solukhumbu
Central Development Region	Janakpur, Narayani & Bagmati	Dhanusha, Mohatttari, Dolakha, Sarlahi, Bara, Chitwan, Makwanpur parsa, Rautahaut, Bhaktapur kavrepalanchowk kathmandu, lalitpur & sindhupalchowk
Western Development Region	Gandaki & Lumbini	Gorkha, kaski , tanahau kapilvastu, Nawalparashi,& Rupendhei
Mid Western Development Region	Rapti ,Bheri, Karnali & Dhaulagiri	Dang, Deukheri, banke Surkhet, Baglung &Jumla
Far Western Development Region	Seti & Mahakali	Kailali &Kanchanpur

1.2.3 Brief History of UTL Mobile

United Telecom Ltd, a joint venture between Videsh Sanchar Nigam Ltd. (VSNL), Mahanagar Telephone Nigam Ltd. (MTNL), and Telecommunications Consultants India Ltd. (TCIL), and Nepal Ventures Private Ltd. (NVPL) plans to offer telephony services in Nepal, based on the wireless local loop (WLL) technology. After exhaustive deliberations & extensive scrutiny, UTL was declared successful bidder by NTA in the bid for basic telephone service based on WLL technology and letter of intent was awarded on 21st June 2001 &,

finally, the license was issued on 4th October 2002.UTL provides WLL wireless phone services and is presently operating in the Central Development Region. The present Network is in 7 zones i.e. 12 districts which includes 15 cities. And has a fair customer base of about 200,000 subscribers owing mainly to its low tariff and easy availability.

Board of Directors of UTL

The Board of Directors of company consists of four members comprising of one nominees each of MTNL, TCIL, Tata Communications Ltd. (formerly VSNL)and NVPL. The following are the Directors of the company

Shri R.S.P Sinha

Chairman and Managing Director

Mahanagar Telephone Nigam Limited (MTNL)

Shri R.K. Upadhaya

Chairman and managing Director

Telecommunications and Consultants India Limited (TCIL)

Shri S.K Gupta

Advisor- Telecom Tata Group

Shri T.C Agrawal

Chairman and Marketing Director

Nepal Ventures Private Limited (NVPL)

Presently, **Shri S.K. Gupta** is the Chairman of Board of Director of United Telecom Limited.

1.3 Strategy of Telecommunication Service

Universal Service Obligation

The telecommunication service providers shall be required to provide service to any customer of the urban areas on demand.

- **Development of Corporate Service**

In the urban areas, arrangement shall be made to provide the leased line, data and other similar corporate services to the government entities and private business enterprises through more than one service provider.

- **Liberalization of the Telecommunication Sector**

The telecommunication sector has been fully opened for the service providers. However, the number of the service providers may be limited due to the radio spectrum. While providing directory service, the service provider shall be required to provide such service incorporating all customers using the service.

- **Open Licensing Regime To Be Applied**

The open licensing regime shall be applied for providing opportunity to all service providers to enter into the telecommunication sector. Transparent procedures shall be applied for granting such license. Moreover, an environment for healthy competition shall be created.

- **Private Sector's Participation to Be Encouraged**

The private sector's participation shall be encouraged for the telecommunication sector. Foreign investment shall be attracted. Arrangement shall be made to regularly inform the private sector about the particulars of reform undertaken in the telecommunication sector and about the opportunity available in this sector.

- **To Enter into Information Society**

By arranging other necessary prerequisites such as extension of telecommunication service and drafting of Cyber Law, Nepal shall be made to enter into the Information Society in an effective manner.

- **Appropriate Information and Communication Technology for the Users of the Rural Areas**

Appropriate information and communication technology shall be made available as per the capacity and need of the users of the rural areas. In this connection, the information and communication technology that do not require special training and literacy based on radio, television and telephone shall be made available in collaboration with the private sector at all. The service of information and communication technology shall be made available to the rural users through the means of small service providers.

1.4 Statement of the Problems

In order to provide access of the telecommunication services to the general public of rural and urban areas of the Kingdom, arrangement shall be made in a manner that telecommunication services shall be made available within shouting distance in the inhabited areas.

The telecommunication services shall be made available on demand in the urban areas of the Kingdom. Corporate telecommunication service shall be made available in the business areas.

Opportunity shall be provided to the customers of the urban areas to choose services from different service providers. Arrangement of opportunity to choose services accordingly shall be extended gradually to the rural areas also.

Arrangement shall be made for availing the use of appropriate information and communication technology for poverty alleviation and development of the rural areas.

Distribution of telecom services, user status, Factor of motivation, curiosity and capability of Nepalese people, and satisfaction level of existing users has to be find out. The probability of establishment of telecommunication industry in Nepalese market has to be researched.

1.5 Scope of the Study

The Developing Countries like Nepal is far ahead in the infrastructure development and technologies too. Among types of industries in Nepal the telecommunication industries is also the one. The telecommunication industries in Nepal are limited and have the monopoly market so the development of Telecommunication industries in Nepal is far better appreciable. Mainly the study is based on the customer opinion which has wide scope to the existing telecommunication industries as well as the new mobile industries. The scopes of mobile industries are listed below in points.

For the existing Mobile industries

1. To see the real picture for the growth of their industry in Nepalese Market
2. To analyze the weakness of existing mobile service providers towards customers, and Nation.
3. To understand the strategy about the customers
4. To Find out the actual market for the development of telecommunications

For the New mobile industries

1. To Find out the strategies followed by the existing mobile industries
2. To Find out the possibility of new market
3. To motivate them to invest in new market than existing one.

1.6 Focus of the Study

The study is mainly based on the customer opinion of different areas, age groups, caste, ethnicity, region, religion etc. The study is mainly based on the opinion of customer who is the real user of Mobile services. The services provided by the existing mobile industries and their tariff rates are the main root of this study. Mainly the study includes the opinion of different people about the services of existing mobile industries, their rates, their facilities and the potentiality for the growth for the emerging telecommunications industries. Some of the focusing points are listed below

1. Future Scope of emerging telecommunications in Nepal
2. Satisfaction Level of Customers on Network coverage, Services and Tariffs
3. Services to be included in New Mobile Services
4. Drawbacks of existing telecommunications if any

1.7 Objectives of the Study

The primary objective of this study is to find out the potential market for the emerging telecommunications in Nepal. Among Many objectives some of the important objectives which the study tries to find out are listed in this manner.

- To evaluate customers' opinion and experiences on the prevailing services of mobile service providers.
- To derive estimation on potential user size/volume for new mobile service provider.
- To retrieve suggestions on anticipated new ideas of services by mobile service provider.
- To identify Satisfaction level of Customers Based on Network, Customer Service, Call rates, Value Added Services
- To Identify the Customer Future Expectation with New Mobile Services or Improvement in existing Mobile Services.

1.8 Significance of the Study

The research work is mainly based on the interest and opinion of the customer who is the real user of the product of Telecommunication industries. The study is done to find out the customer opinion regarding pros and cons of telecom industries. This study is also the primary survey for the potential market for the new emerging telecommunication industries in the opinion of Customer. The main aspect of this study is to promote the industries in the field of telecommunications. The dissatisfaction regarding the network coverage, services,. Facilities and rates of the customer should be decreased by introducing innovative services in mobile. The monopoly of limited telecommunications regarding rates, facilities, services should be removed. The importance of this study is to introduce the real problems of customers.

1.9 Limitations of the Study

- All the data presented here is the representation of the views of the sample size of 1500.
- All the figures are in percentage.
- Demerits of this survey are that it doesn't represent the total market as a whole and only that of sample size selected.
- The Data presented are Collected within the short period of Six Months
- The Data are based on consumer opinion.

1.10 Organization of the Study

As specified format of the research study, this study also comprises of five major chapters they are.

Chapter - I: Introduction

This chapter contains the brief introduction of the subject matter i.e. General background of Telecommunication services, Brief overview of telecommunications of Nepal, significance of the study, Statement of the problem, Objectives of the study, Significance of the study, Limitations of the study, Methodology of the Study, and Organizations of the study.

Chapter - II: **Review of Literature**

This Chapter Describes towards the review of literature of related studies. It Contains conceptual review and Major studies Related with this research.

Chapter - III: **Research Methodology**

This chapter acknowledges the research methodology used in this study. It includes Research Design, Nature and Source of Data, Period covered, Data Processing Procedure and Tables and Diagrams used for the study.

Chapter - IV: **Presentation and Analysis of Data**

In This chapter various data (Primary and Secondary) data are gathered from different sources and Presented as required by the research objective. In this chapter data are analyzed and interpreted with the help of various tables and diagrams.

Chapter - V: **Summary, Conclusion and Recommendations**

This Chapter states Summary, conclusion and recommendations of this study.

CHAPTER-II

REVIEW OF LITERATURE

Review of Literature means reviewing research studies or other relevant propositions in the related area of the study so that all the past studies their conclusions and deficiencies may be known and further research can be concluded. It is an integral and mandatory process in research work (Joshi, 2003). It supports the researcher to explore the relevant and true facts for the reporting purpose in the field of study. It also helps to find out his lacuna in the earlier research work and to stop duplication of the previous work. It may be various forms like book, booklet, thesis reports etc.

This chapter highlights the literature available related to the present Study. This chapter has divided into two sections, Review of Conceptual Framework and review of previous related Studies.

2.1 Review of Conceptual Framework

These are the general Concepts of Market Analysis Which are listed below:-

2.1.1 Market

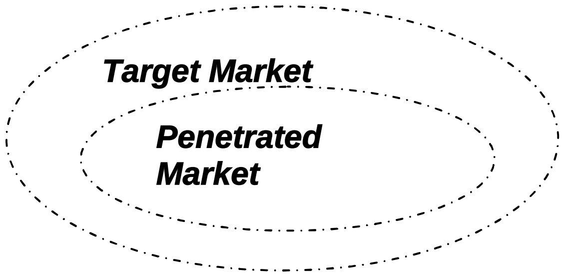
In Marketing The term Market Refers to the group pf Consumers or Organizations that is interested in product, has the resource to purchase the product, and is permitted by law and other regulations to acquire the product.

Defining the Market is the first step in analyzing it. Since the market is likely to be composed of consumers whose needs differ, Market Segmentation is useful in Order to better understand those needs and to select the group within the market that the firm will serve.

Market Definition

Figure 2.1

Total Population



Conceptual Diagram

Beginning with total population, various terms are used to describe the market based on the level of narrowing:

Total Population

- Potential Market – those in the total population who have interest in acquiring the product.
- Available Market – those in the potential market who have enough money to buy the product.
- Qualified available Market- those in the available market who legally are permitted to buy the product.
- Target Market- the segment of the qualified available market that the firm has decided to serve (the served Market).
- Penetrated Market- those in the target market who have purchased the product.

In above definitions product refers to both Physical products and services:
The size of the market is not necessarily fixed. For example the size of the available market for a product can be increased by decreasing the product's price, and the size of the qualified available market can be increased through changes in legislation that result in fewer restrictions on who can buy the product.

Defining the market is the first step in analyzing it. Since the market is likely to be composed of consumers whose needs differ, Market Segmentation is useful in order to better understand those needs and to select the groups within the market that the firm will serve.

A market is any one of a variety of different systems, institutions, procedures, social relations and infrastructures whereby person's trade, and goods and services are exchanged, forming part of the economy. It is an arrangement that allows buyers and sellers to exchange things. Markets vary in size, range, geographic scale, location, types and variety of human communities, as well as the types of goods and services traded. Some examples include local farmers' markets held in town squares or parking lots, shopping centers and shopping malls, international currency and commodity markets, legally created markets such as for pollution permits, and illegal markets such as the market for illicit drugs.

2.1.2 Market Segmentation

Market Segmentation is the identification of the portion of the market that is different from one another. Segmentation allows the firm to better satisfy the needs of its potential customers.

2.1.2.1 Need for Market Segmentation

The Marketing Concept calls for the understanding customers and satisfying their needs better than the competition But different customers have different needs, and it rarely is possible to satisfy all Customers by treating alike.

Mass Marketing Refers to the treatment of the market as a homogeneous group and offering the same marketing Mix to all customers. Mass Marketing allows economies of scale to be realized through mass production, Mass Distribution and mass communication. The drawback of mass marketing is that customer needs and preference differs and the same offering is unlikely to be viewed as optimal by all customers. If firms ignored the differing customer needs, another firm likely would enter the market with a product that serves a specific group, and the incumbent firms would lose those customers.

Target marketing on the other hand recognizers the diversity of customers and does not try to please all of them with the same offering. The First step in target marketing is to identify different market segments and their needs. Generally Segmentation is done according to characteristics of Market.

2.1.2.2 Bases for Segmentation in Consumer Market

Consumer Market can be segmented on the following Customer characteristics

- Geographic
- Demographic
- Psychographic
- Behavioralistic

2.1.2.3 Bases for segmentation in Industrial Markets

In contrast to consumer Industrial Customers tend to be fewer in number and purchase larger Quantities. They evaluate offerings in more detail, and the decision process usually involves more than one person. These characteristics apply to organizations such as manufacturers and service providers as well as resellers, Governments and institutions.

Many of the consumer market segmentation variables can be applied to industrial market. Industrial markets might be segmented on characteristics such as

- Location
- Company Type
- Behavioral Characteristics

2.1.3 Market Analysis

The Goal of Market analysis is to determine the attractiveness of a market and to understand its evolving opportunities and Threats as they relate to the strengths and weakness of the firm.

David A Aaker outlined the following Dimensions of a market Analysis:

- Market Size
- Market Growth Rate
- Market Profitability
- Market Trend
- Key Success Factors

2.1.3.1 Market Size

The Size of the Market can be evaluated based on present sales and on potential sales if the use of the product were expanded. The following are some information sources for determining market size.

- Government Data
- Trade Associations
- Customer Survey

2.1.3.2 Market Growth Rate

A Simple means of Forecasting the market growth rate is to extrapolate historical data into the future. While this method may provide a first order estimate, it does not predict important turning points. A better method is to study growth drives such as Demographic Information and sales Growth in complementary Products. Such drivers serve as leading indicators that are the most accurate than simply extrapolating historical Data.

2.1.3.3 Market Profitability

While different firms in a market will have different levels of Profitability, the average profit potential for a market can be used as a guideline for knowing how difficult it is to make money in the market Michael porter devised a useful framework for evaluating the attractiveness of an industry or market. This framework known as porter's five forces identifies five factors that influence the market profitability.

- Buyer Power
- Supplier Power
- Barriers to entry
- Threat of Substitute Products
- Rivalry among Firms in the industry

2.1.3.4 Market Trends

Changes in the market are important because they often are the source of new opportunities and threats. The relevant trends are industry- dependent, but some examples include changes in price sensivity demand for Variety, and level of emphasis on service and support, regional trend also may be relevant.

2.1.3.5 Key Success Factors

The key success factors are those elements that are necessary in order for the firm to achieve its marketing objectives. A few examples of such factor include:

- Access to unique resources
- Ability to achieve economies of Scale
- Access to distribution Channel
- Technological Progress

It is important to consider that key success factors may change over time, especially as the product progresses through its life cycle.

2.2 Review of Previous Related Studies

This part is a descriptive presentation of the literature work done by various authors and previous researchers. The main objective of this part is to analyze the previous research study. The purpose of literature review is thus, for find out what research studies have been conducted in one's chosen field of study. And what remains to be done. It provides the foundation of developing a comprehensive theoretical framework from which hypothesis can be developed for testing. The literature survey also minimizes the risk of pursuing the dead ends in research.

So far as known to the researcher, studies on Market analysis of telecommunications in Nepal based on customer opinion are very few. Numerous studies have been made in the area of effectiveness of sales planning in Nepal Telecom, Human resource planning in Nepal based on Nepal telecom, profit planning and control in public utilities sector based on Nepal Water Supply Corporation and Nepal telecom but the detail study on market analysis of telecommunications has not been conducted till this date. So, some of the notable literatures relevant to the study are reviewed in this study to identify the relevance of the present study. Some reviews are as follows:

Tripathi (2007) has conducted a research on the topic *"Effectiveness of Sales Planning in Nepal Telecom (With Special Reference to Nepal Telecom)"* was submitted to central department of Management T.U.

The Main Objective of this research works are as follows:

- To analyze the existing sales planning system of Nepal telecom with seasonal demand.
- To study the relationship between sales plan with production Plan.

- To analyze the relationship between sales and profit.
- To analyze BEP of Nepal telecom
- To provide suitable suggestion and recommendation on the basis of study

The major findings of Tripathi related with this Study are as follows:

- The total actual sales units of NT are in increasing trend. It exceeds budget In F.Y. 2060/061 and 2062/063. Actual sales revenue is always higher than target except F.Y. 2061/062
- The actual sales units of PSTN telephone service of NT is fluctuated every Year.
- There is high degree of Positive correlation of total sales units, but low degree of Positive correlation of PSTN sales units.
- The cost volume Profit analysis of NT Shows that BEP is Satisfactory.
- Internal and external variables Providing opportunity, threats, strengths and weakness are not identified clearly.

Adhikari (2009) has conducted a research on the *topic "The effectiveness of promotional Strategy of Mobile Services in Society with SP (With Special Reference of Mero Mobile Services)* was submitted to central department of Management T.U.

The Main objectives of This Study are:

- To identify response of Target Audience of Mero Mobile
- To Identify the Brand awareness of Mero mobile
- To identify the promotional tools adopted by Mero Mobile

The Major Findings of Mrs. Adhikari are stated in Brief:

- Numbers of Respondent used Mero Mobile service it has least network Problem, and it provides lots of Facility like free talk time. MMS ad Ramaro Tariff. No body has enough time to involve in same problem for long time. So, Hassle free is also most effective service of Mero Mobile.

- The Sales Promotion and advertising is the most attractive strategy used by Mero Mobile service while performing promotional strategy. One hr talk time, Ramro Tariff is the most successful campaign.
- The total no of subscribers which the mero Mobile has achieved till date stands at 1710000. As per the Table 1575000 No of Subscribers are achieved from the consumer Promotion and the rest are from other activities.

2.2.3 International Telecommunication Union (ITU)

It has conducted a small tactical survey "Background Information on the ICT* Static of Nepal: the state of ICT Collection and Disseminations "Which conclude like this *NTA is collecting and Disseminating the telecommunication Indicators those defined By *ITU which are comparable across countries Although this is being done at a regular interval, difficulty in obtaining data on time has been a major concern in our effort to make those indicators available to the stake holders without delay. NTA reports the data available from the operators but doesn't validate the authenticity of such data. However after several years' effort NTA has been able to bring out the report that solely reflects the ICT static, which carries much significance for the development of ICT in the country. NTA also feels that there is a need for a regular study/ Research on the impact of the ICT in socio economic as well as overall national development of the Country. NTA Needs Technical Assistance to Build this Capacity. It is Believed that Periodic Reporting of *ICT Related Data is a Significance contribution for Bringing out a reliable Static for the General Public (*Source International Telecommunication union (Telecommunication Development Bureau, Document INF/010-E24 February 2009).

2.2.4 Telecom Network of the Country

According to quarterly performance of Nepal telecom conducted on April 2008 With the introduction of new Telecom Operators, the same tempo of growth Continues with the number of distributed lines increasing from approximately 65,000 in 1992 to over 8, 05,061 (PSTN + WLL), Post-paid Mobile Subscribers 1, 13,742 and Pre-paid Mobile Subscribers 28, 82,555 till 12April, 2008 (30 Chaitra, 2064). The fully digital network offers full national. Nepal Doorsanchar Company Limited, the only wire line operator in Nepal has 233 Telephone exchanges in operation at 224 different locations in 72 districts of Nepal. There are a total of 4575 International telephone circuits in operation including Microwave circuits (Based on NDCL MIS).

2.3 Research Gap

I have found so many previous research reports on marketing field with related subject Matter. But the choice of this subject is due to the fact, there is no previous research found on Market Analysis of Telecommunications of Nepal Based on customer survey. The study tried to find out the probability of market for the emerging telecommunication industry in Nepalese Market by doing Customer Survey. The study tries to find out the status of landline and mobile users, habit of Monthly expenditure on mobile services, satisfaction level of customers regarding network, tariffs, and services. By analyzing these elements of existing telecommunications of Nepal the study tries to find out the potential market for rising telecommunication. In This study the existing market trend, Growing status, factors influencing customers for using telecommunication services are studied and analyzed. Research has attempted to prepare and present this report with full enthusiasm and all possible primary as well as secondary data. Sources are collected analyzed and presented here in respective Manner.

CHAPTER - III

RESERCH METHODOLOGY

The Main Objective of This chapter is to present the details of research design followed during the case Study. The chapter mainly includes description of research design, nature and source of Data, populations and Sample and technique of Analysis Research Design.

3.1 Research Design

The main objective of this study is to analyze and evaluate the market of telecommunications of Nepal. Especially the telecommunications included in this study are Nepal Telecom; spice Nepal so called Mero Mobile and United Telecom of Nepal. The primary objective of this study is to search for the potential market for emerging telecommunication in Nepal. In order to meet the primary as well as secondary objectives it adopts the descriptive case Study research design.

3.2 Nature and Sources of Data

In this study, both primary and secondary data have been used. The primary data have been collected through the customer survey. The identical locations have been based on, primarily, intending to cover the 5 administrative regions of the country.

Secondary data have been collected from annual report of Nepal telecom, spice Nepal, and UTL, websites of concerned telecommunications, journals, News, Bulletins, and Published articles and Books.

3.3 Population and Sample

Nepal's population doubled in the last 30 years from around 12 million in 1971 to 23 million in 2001 The population grew at a rapid rate between 1971 and

1981 from 2.1 percent to 2.6 percent, but the population growth rate has slowed since 1981 to just over 2 percent (Central Bureau of Statistics, 2003). The population density has doubled over the three decades from 79 persons per square kilometer in 1971 to 157 persons per square kilometer in 2001. Life expectancy in Nepal is improving, increasing by about 20 years for males and females between 1971 and 2001. Female life expectancy is slightly higher than male life expectancy (60.7 years versus 60.1years). The Total * population of Nepal according to Development regions is as follows

Table 3.1

Total Population of Nepal According to Development Regions

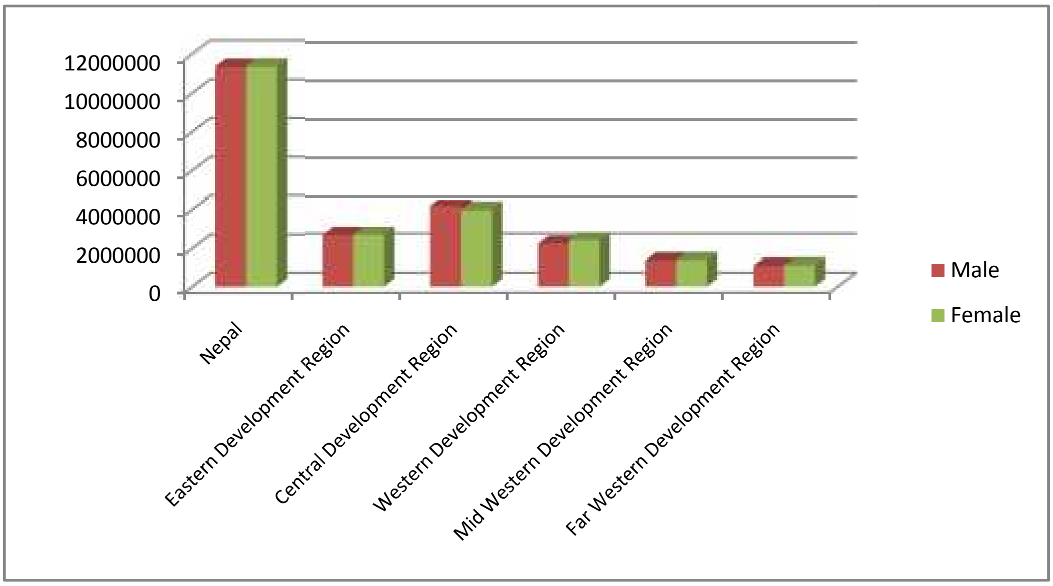
Area	**Total Household**	**Population**		
		Total	**Male**	**Female**
Nepal	4174374	22736934	11359378	11377556
Eastern Development Region	1000358	5286890	2642320	2644570
Central Development Region	1465753	7988612	4088292	3900320
Western Development Region	863045	4571013	2198170	2372843
Mid Western Development Region	479817	2707244	1349073	1358171
Far Western Development Region	365401	2183175	1081523	1101652

**The base of population is taken From CBS data 2003*

Incremental Population is Not Considered in this Calculation

Figure 3.1

Population Distributed By Development Region



Among total Population the sample have been taken form different cities covering 5 administrative regions of the country. For this study 44 identical cities of 5 administrative regions have been selected which fulfills target sample size of 2000 people. The selected Market for Sample is listed below.

Table 3.2
Sample Market with Development Regions

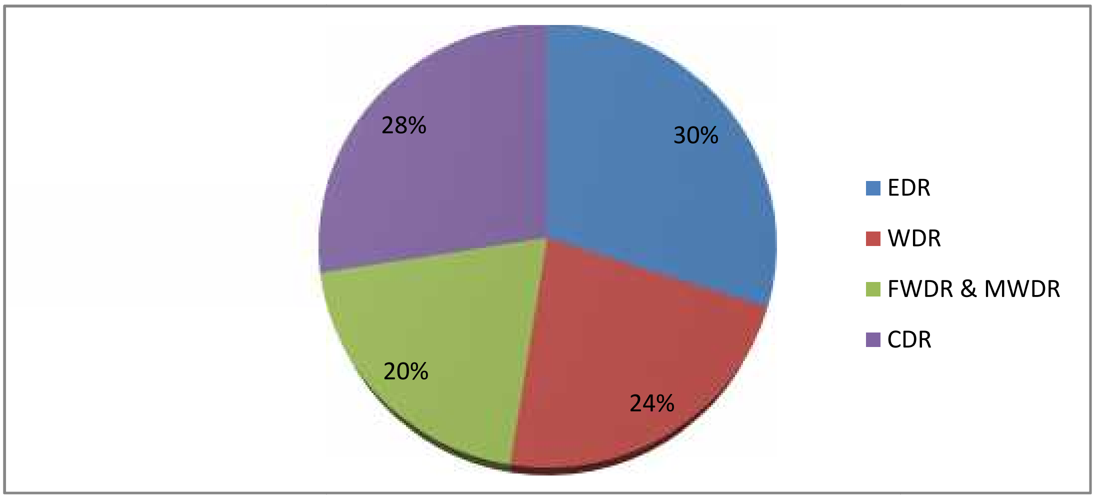
S.N	Sample Market	Development Regions
1	Birtamode	Eastern Development Region
2	Illam	
3	Dharan	
4	Dhankuta	
5	Biratnagar	
6	Jhapa	
7	Rajbiraj	
8	Lahan	
9	Gaighat	
10	Malangwa	
11	Lalbandi	
12	Gaur	
13	Arghakhachhi	Western Development Region
14	Gulmi	
15	Butwal	
16	Tansen	

17	Pokhara	
18	Baglung	
19	Damauli	
20	Lamjung	
21	Gorusinga	
22	Kohalpur	Mid Western Development Region
23	Surkhet	
24	Ghorai	
25	Rolpa	
26	Salyan	
27	Pyuthan	
28	Gorusinga	
29	Doti	Far western Development Region
30	Dhangadi	
31	Mahendranagar	
32	Julma	
33	Kailali	
34	Kanchanpur	
35	Dadeldhura	
36	Kathmandu	Central Development Region
37	Lalitpur	
38	Bhaktapur	
39	Banepa	
40	Charikot	
41	Janakpur	
42	Sindhuli	
43	Birgunj	
44	Hetauda	
45	Narayanghat	
46	Kawasoti	

The Stratified random sampling technique has been adopted to collect information. First of all the total population has been divided into 5 administrative regions and from 5 administrative regions the major densely populated cities are selected for sample. 30% from Eastern, 22.5% from western, 20% from far western and mid western and 27.5% from central development region of the sample is taken for the study. For the study the samples are further sub divided into Gender wise, age wise location wise, user and Non user, since Kathmandu valley is the most densely populated cit the sample is further divided into within Kathmandu Valley and Outside Kathmandu Valley.

Figure 3.2

Sample Population According to Development Region



3.4 Data Collection Procedure

The Questionnaire has been distributed to 2000 people within the kingdom of Nepal selecting the major populated cities of 5 administrative Regions. Among 75 districts 46 cities have been selected for the study. The List of The 46 cities is presented above. Around 50 customers have been selected for the questionnaire survey. For the survey people of different age Group, Literate and illiterate people and Male and Female.

The primary sources of Data have been used to collect the job related information. It has been collected through questionnaires and interview undertakings whereas secondary data have been collected from different journals, websites of concerned offices, bulletins and prospectus of Concerned Telecommunications. The Data collection work has been completed within 6 months stared from 1st Ashad to 31st Poush.

3.5 Technique of Data Analysis

The collected Data are logically and systematically considered and Tabulated in different format. Basically the percentage is calculated to draw the inference.

The key information is received during the period of Working in An advertising agency, Called ANS creation. The information are carefully considered and analyzed during the interpretation of Facts and Figures

CHAPTER - IV

PRESENTATION AND ANALYSIS OF DATA

The chapter present and interprets the various data gathered from the application of different methods and Presented and decorated as required by the research objective. In this chapter, data are interpreted and analyzed with the means of collected questionnaires and interviews.

In this chapter the collected data are tabulated and interpreted. In this Study the findings of the customer survey is tabulated by using personally developed Software Named SPSS. From this soft ware it is easy to tabulate and analyze the Findings. First of all the Findings are Tabulated and Presented in Table and Later on the findings is Shown on Graphical Representation, For The Market Analysis, customer survey is performed preparing the Questionnaire . To meet the primary objective of This Study the survey questionnaire tries to find out the status of Landline and Mobile users, then its demographic and Socioeconomic Status in Survey Areas. The study also tries to find out the user of UTL, Postpaid and Prepaid of Mero mobile and NTC and its reason. People expenditure habit on Mobile phones is also presented in this study. The Satisfaction level and Dissatisfaction level of People on telecommunication services are also presented in this study with the suggestions of services to be included in Mobile Phones. The Detail of this study is Presented Below:

4.1 Status of Landline and Mobile users

4.1.1 Distribution of Landline and Mobile Users According to Development Region

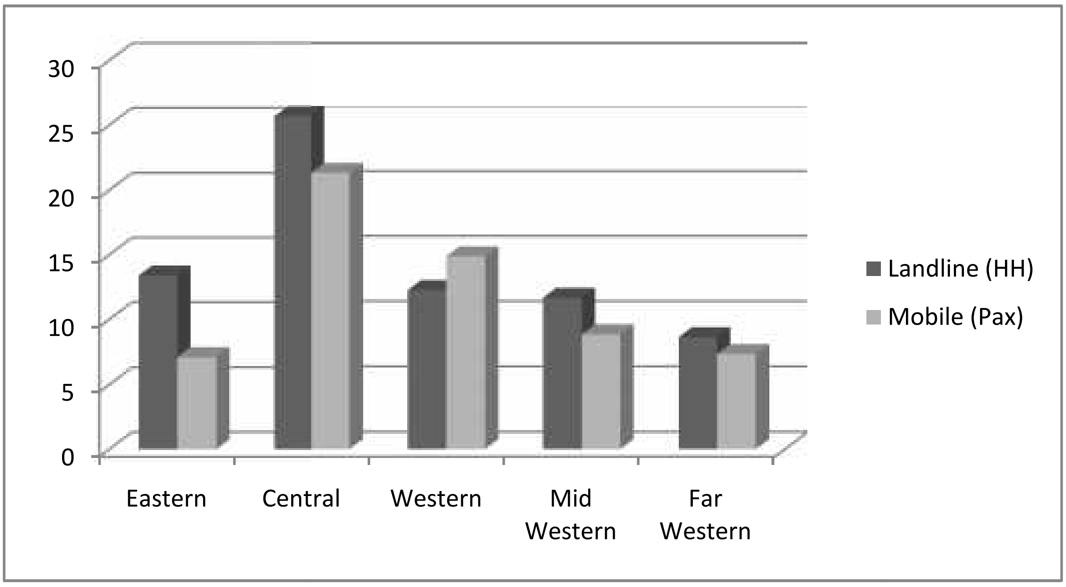
Table 4.1

Distribution of Landline and Mobile Users According to Development Region

	No of Households	No of Populations	% of Landline and Mobile Users in Survey Areas	
			Landline (HH)	Mobile (Pax)
Overall	4174374	22736934	15.2	14.5
Kathmandu Valley	345562	1645091	85.2	66.1
Outside Kathmandu Valley	3828812	21091843	8.7	10.4
Development Regions				
Eastern	1000358	5286890	13.4	7.1
Central	1465753	7988612	25.7	21.2
Western	863045	4571013	12.2	14.8
Mid Western	479817	2707244	11.6	8.8
Far Western	365401	2183175	8.6	7.3

Figure 4.1

Population Distribution By Development Regions



Up to last fiscal year (Ashadh 2065/66) the subscriber of NTC (except landline) was around 3 million, Mero Mobile 2.26 million and UTL 0.4 million. NTSC's landline subscription was 0.63 million.

Table 4.1 depicts that in Nepal overall there is only 14.5% subscription of mobile phone services. Major gap area can be seen in the Far Western, Mid Western and Eastern region with mobile service subscription of 7.3%, 8.8% and 7.1% respectively. Present analysis shows that there is high potentiality of new mobile phone services in these regions where the concentration of population is higher (The Base of Population is taken from CBS data 2003, Incremental Population is not considered in this calculation).

Figure 4.1 represented by the landline indicates that there is slow development in PSTN service whereas mobile services have shown considerable development in the small period of time. Reason behind this is the hassles and investment during installation of PSTN landline service which is not there in the case of mobile phone. In overall Nepal there is only 15.2% (household base) subscription of landline service. Highest (85.2%) subscription of landline is in Kathmandu Valley which is because there was no other substitute in the initial stage which led to higher subscription. Apart from that corporate customers and offices have multiple subscriptions.

4.1.2 Distribution of Landline and Mobile Users by Demographic and Socioeconomic Status in Survey Areas

Table 4.2

Distribution of Landline and Mobile Users by Demographic and Socioeconomic Status in Survey Areas

		% of Landline and mobile users in survey areas	
		Landline	Mobile
Gender	Male	45.9	78.0
	Female	33.1	64.0
Age Group	15-19	32.1	86.7
	20-24	46.4	66.1
	25-29	58.0	75.9
	30-59	66.0	72.9
	60+	89.3	11.7
Educational Level	Illiterate	47.3	23.3
	Read/write	67.7	26.7
	Under SLC	82.8	36.4
	11-12/Certificate	20.8	81.4
	Bachelor	74.9	76.2
	Masters and above	76.9	65.5
Occupation of Respondent	Agriculture	49.4	26.5
	Business	89.4	79.8
	Industry	69.0	52.0
	Government service	93.3	69.5
	Government teacher	94.1	28.5
	Private service	89.3	85.7
	Private teacher	68.9	73.0
	Housewife	80.3	36.0
	Student	58.0	77.4
	Others	79.5	72.8
Monthly Income of Respondent	less than 5000	20.8	62.7
	5000-9999	78.6	80.1
	10000-14999	66.5	92.1
	15000-19999	98.2	96.6
	20000 and above	96.6	94.3

Table 4.2 depicts the general usage pattern of landline and mobile phones. It can be find out that in general male use more mobile phone than that of female. Further in the age group, higher the age, higher the use of landline. Mix of both can be seen in 25-29 and 30-59 years age which uses both landline and mobile.

This age group has more spending capacity. Age group of 15-19 uses mobile phone to show off. Generally this age group use mobile for SMS and miss call.

Illiterate and people with ability of only reading and writing use more landline than mobile. However, penetration of communication is less in this group. Although under SLC use more landline, the trend of using mobile is increasing in this education group. Maximum use of mobile is being done by 11/12 and certificate level students. However, this group is not revenue generator. They generally use mobile for SMS and miss call. Bachelor and Masters Level use mix of both. Generally they are also earning group and have capacity to spend in occupational group division, agriculturists use landline more than mobile phones and in general, they are not using means of communication frequently. Highest mix of both landline and mobile phones can be seen in business and private sector. In the similar manner Government job holders and housewives use landline more than mobile service. Higher the income, higher the use of both Landline and Mobile. Highest of mix can be seen in the income group 15000 and above.

4.1.3 Table of Cellular Mobile Phone and Fixed Telephone Service

Table 4.3

Cellular Mobile Phone and Fixed Telephone Service

	Cellular Mobile Service Providers		**Fixed Telephone Service Providers**	
	NDCL	SPNL	NDCL	UTL
Number of Subscribers(Postpaid)	106546	7196	694260	110801
Number of Subscribers(Prepaid) including CDMA and WCDMA Mobile	1645169	1237386		
Services areas in terms of Districts (No of Districts):	43	39	72	9
Average Revenue Per user in Rs	975	378.07	910	515.38

**Source: Quarterly Performance Indicator of Telecom Service*

According to quarterly performance indicator of Telecom services/ sector (15 January2008-12 April 2008) there coverage of NDCL is on 72 districts on which Mobile service providers are on 43 districts and fixed line telephone services is on 75 districts. Similarly the quarterly performance indicator has not shown the no of Subscribers according to region, gender, and literacy rate etc, but it indicates the population (Subscriber) according to Type that is Post paid and Prepaid and it also indicate the subscriber according to Mobile Phone users and Fixed Line users. The above table clearly indicates that the fixed line service Provider industry is NDCL and UTL but the Cellular Mobile Service Provider is NDCL and SPNL. The above Data Shows that the Subscribers have used More Fixed line Services than Cellular Mobile Services. But the data also that the user or subscriber of cellular phone is increasing day by day.

4.2 Distribution of GSM Prepaid and Postpaid and CDMA Users

Table 4.4
Distribution of GSM Prepaid and Postpaid and CDMA Users

		Prepaid Type	Postpaid Type	CDMA Type
	Nepal	64.1	4.2	4.3
Ktm vs others	Kathmandu valley	65.1	9.4	2.5
	Outside Kathmandu valley	63.9	3.6	4.7
Development Region	Eastern	64.9	4.4	2.6
	Central	54.7	7.8	3.5
	Western	71.0	3.4	3.4
	Mid Western	61.8	3.3	5.9
	Far Western	72.3	2.9	6.9
Gen der	Male	67.6	5.2	4.7
	Female	56.3	1.8	3.4
Age Group	15-19	59.6	0.8	4.1
	20-24	68.2	2.2	3.0
	25-29	67.5	4.1	3.9
	30-59	59.4	6.8	5.9
	60+	41.4	10.3	3.4
Educational Level	Illiterate	23.9	0.2	4.3
	Read/write	40.2	0.7	3.5
	Under SLC	59.4	1.8	4.6
	11-12/Certificate	71.2	5.2	4.1
	Bachelor	78.0	6.6	4.7
	Masters and above	79.5	12.1	6.1
Occupation of Respondent	Agriculture	34.0	0.3	2.9
	Business	67.9	5.4	6.1
	Industry	43.3	6.2	3.1
	Gov-service	74.5	8.8	5.0
	Gov-teacher	78.8	7.7	5.8
	Private service	73.4	6.0	4.1
	Private teacher	63.5	1.6	4.8
	Housewife	49.0	1.7	3.4
	Student	68.0	2.3	3.2
	Others	69.1	1.2	2.5
Monthly Income of Respondent	less than 5000	54.4	0.7	4.3
	5000-9999	71.3	3.2	4.6
	10000-14999	80.4	10.3	6.6
	15000-19999	76.7	14.2	5.8
	20000 and above	65.0	17.9	4.1

Based on table 4.4, users of GSM prepaid mobile is significantly higher than the GSM postpaid and CDMA. However, users of GSM postpaid mobile is higher in Kathmandu valley than in other regions. Similarly, users of CDMA phone are higher in Far Western region than the other regions.

4.3 Distribution of Brand of Mobile Users of NTC, Mero Mobile and UTL (Users Only)

Table 4.5
Distribution of Brand of Mobile Users of NTC, Mero Mobile and UTL (Users Only)

		NTC	Mero Mobile	UTL
	Overall	52.0	46.5	1.5
Ktm vs. Others	Kathmandu Valley	67.6	28.9	3.5
	Outside Kathmandu	51.5	48.3	0.2
Development Region	Eastern	59.9	40.1	0.0
	Central	69.1	28.4	2.5
	Western	47.8	52.2	0.0
	Mid Western	70.5	29.5	0.0
	Far Western	76.4	23.6	0.0
Gen der	Male	74.2	25.1	0.7
	Female	35.8	60.9	3.3
Age Group	15-19	45.8	52.6	1.6
	20-24	65.2	32.2	2.6
	25-29	67.5	31.8	0.7
	30-59	71.4	27.7	0.9
	60+	85.7	11.9	2.4
Educational Level	Illiterate	20.7	55.4	23.9
	Read/write	28.9	53.4	17.7
	Under SLC	29.7	51.8	18.5
	11-12/Certificate	43.3	49.8	6.9
	Bachelor	70.2	27.2	2.6
	Masters and above	85.9	13.1	1.0
Occupation of Respondent	Agriculture	35.7	36.5	27.8
	Business	60.5	27.8	11.7
	Industry	45.9	38.8	15.3
	Gov-service	78.4	21.4	0.2
	Gov-teacher	76.7	21.9	1.4
	Private service	86.6	13.4	0.0
	Private teacher	84.3	15.7	0.0
	Housewife	52.8	38.4	8.8
	Student	69.7	30.3	0.0
	Others	59.7	30.9	9.4
Monthly Income of Respondent	less than 5000	65.8	29.4	4.8
	5000-9999	64.2	26.6	9.2
	10000-14999	78.5	20.9	0.6
	15000-19999	92.6	7.4	0.0
	20000 and above	98.7	1.3	0.0

Table 4.5 shows that Mero Mobile is more active in outside Kathmandu Valley because of unavailability or less supply of sim cards of NTC Mobile. In overall scenario, brand size of NTC is 52%, Mero Mobile is 46.5% and UTL is 1.5% among the total positive responders.

But According to quarterly performance indicator of Telecom services/ sector (15 January2008-12 April 2008) The subscriber base of incumbent NDCL has reached 17,51,715 including GSM, CDMA and WCDMA mobiles whereas that of Spice Nepal is 12,44,582 GSM mobiles, hence a total of 29,96,297 mobile subscribers. This quarter has also registered a significant growth in mobile subscriber base as NDCL distributed 2, 58,446 new lines whereas SNPL distributed 2, 37,727 lines in the same period, almost equal in number. Even though the postpaid subscribers of SNPL added 1144postpaid subscribers, the number of postpaid subscribers for NDCL has gone down to 1, 06,546, less by 3189 from previous quarter. SNPL now holds 41.54% of the market share, slightly more than the previous quarter whereas that of NDCL has decreased to 58.46%. The mobile customer base has still continued to grow and it is about to cross 3 million mark. Apart from Kathmandu Valley, NDCL is providing mobile service in 43 districts (old data) and Spice Nepal Pvt. Ltd. too has extended its service in 39 districts, five more than the previous quarter. The mobile penetration has been increasing steadily and it has reached 11.11 in this quarter. Subscriber base Of NDCL and SNPL is shown as below.

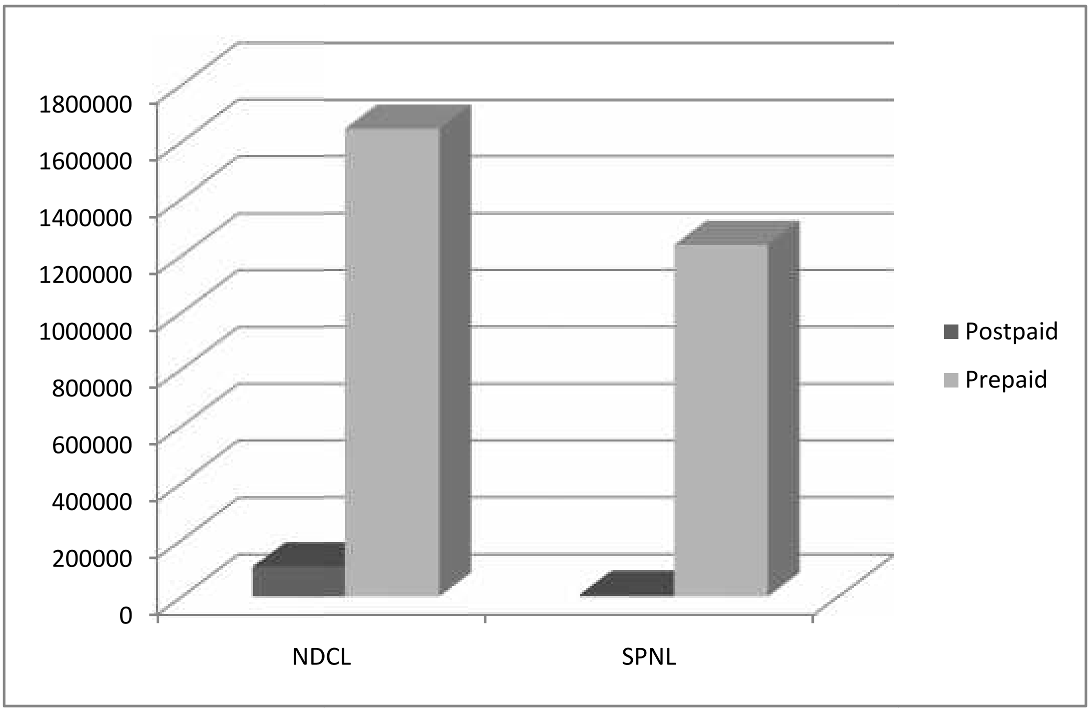
Table 4.6

Subscribers of Cellular Services

	NDCL	SPNL
Postpaid	106546	7196
Prepaid	1645169	1237386

Figure 4.2

Raphical Representation of Cellular Services of NDCL and SPNL



4.4 Reasons for Using Mobiles

Table 4.7

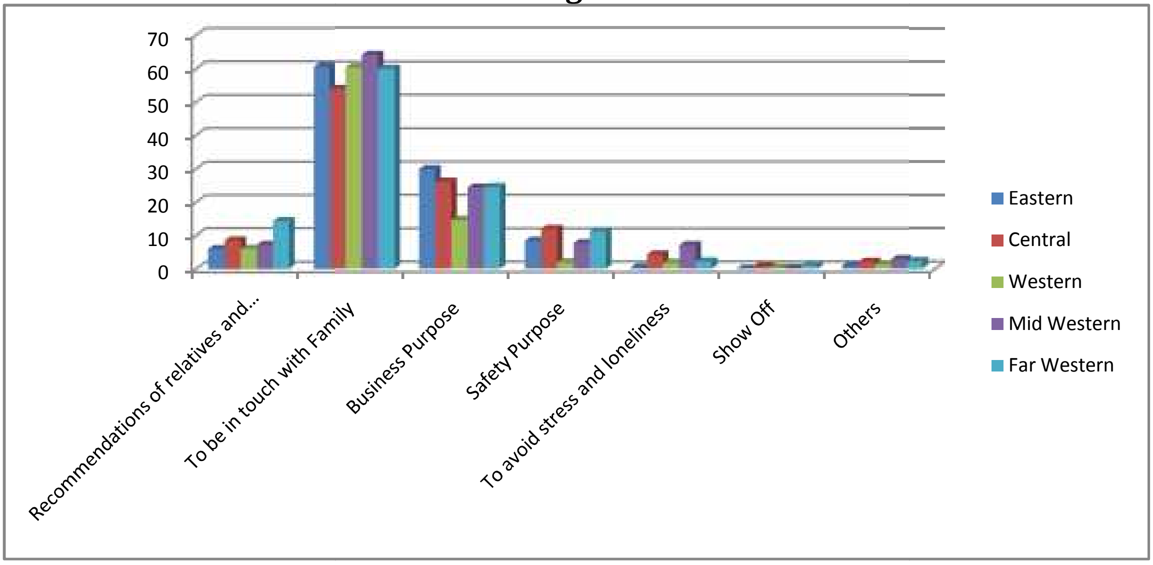
Reasons for Using Mobiles

		Recommendations of relatives and Friends	To be in touch with Family	Business Purpose	Safety Purpose	To avoid stress and loneliness	Show Off	Others
	Overall	8.5	59	23.8	8.6	3.2	0.5	1.9
Kathmandu vs others	Kathmandu	2.7	62.9	29.5	5	0.5	0.5	1.1
	Outside Kathmandu	9.5	58.4	22.8	9.2	3.6	0.5	2
Development Region	Eastern	6	60.6	29.9	8.4	0.4	0	1
	Central	8.6	53.9	26.1	12	4.3	0.7	2.1
	Western	6.1	60.4	14.6	1.9	1.8	0.3	1.3
	Mid Western	7.3	64.2	24.3	7.7	7.1	0.2	2.9
	Far Western	14.3	60	24.5	11.3	2.2	1	2.2
Gender	Male	9.6	60.1	30	9.9	3.7	0.7	2.4
	Female	6	56.5	9.7	5.6	2	0.1	0.8
Age Group	15-19	14.7	53.8	5.3	6.8	4.7	0.3	1.2
	20-24	10.2	62.2	12.9	8.1	3.7	0.3	2
	25-29	7.9	61.3	31.8	10.4	3.6	0.8	2
	30-59	5.1	56.2	33.4	8.5	1.7	0.4	2.2
	60+	10.3	34.5	10.3	0	3.4	0	0
Educational Level	Illiterate	2.2	28.3	10.9	8.7	1.1	1.1	1.1
	Read/write	7.2	38.7	17.9	3.7	3	0	0.5
	Under SLC	10.1	53.5	22.5	7.3	3	0.1	1.9
	+2/Certificate	9.1	64.2	24.3	10.4	3.7	0.8	2.5
	Bachelor	8.6	73.2	26.6	10	3.1	0.5	2.3
	Masters and above	4.5	75.8	40.2	15.2	2.3	2.3	1.5

Occupation of Respondent	Agriculture	6.5	30.1	12.8	1.9	1.9	0.6	0.6
	Business	7.5	57.1	53.2	9.3	1.6	0.4	0.8
	Industry	3.1	35.1	36.1	5.2	1	0	1
	Gov- service	10	75.7	17.2	13.8	4.2	0.4	3.4
	Gov-teacher	9.6	67.3	30.8	11.5	3.8	3.8	1.9
	Private service	7.1	67	21.3	10.1	4.1	1.1	3.7
	Private teacher	4.8	58.7	7.9	6.3	3.2	0	4.8

	Housewife	3.1	53.2	3.1	6	3.1	0.3	1.1
	Student	13.8	66.2	1.7	8.8	4.8	0.4	2.4
	Others	9.9	53.1	25.9	9.9	6.2	0	4.9
Monthly Income of Respondent	less than 5000	11.8	50.6	12.8	9.1	3.1	0.5	2
	5000-9999	7.6	62.4	33.4	10.6	3	0.4	2.3
	10000-14999	5.3	68.8	50.5	10	2.3	1.7	1
	15000-19999	5.9	69.2	59.2	8.3	0.8	0	0.8
	20000 and above	5.7	63.4	68.3	17.1	0.8	0.8	2.4

Figure 4.3
Reasons for Using Mobile Phone



The data reveals that, among these different reasons for using mobile phone, the most important reasons are - to be in contact with the family and for business purpose. Except in few cases, more than 50% of the respondents in different categories use mobile phones to be in direct contact with the family. It is the primary reason for the use of mobile phones. The second important reason is for business purpose.

4.5 Distribution of Monthly Expenditure on Mobiles

Table 4.8
Distribution of Monthly Expenditure on Mobiles

		Monthly Expenditure on Mobiles including all types				
		Less than 500	500-999	1000-1499	1500-1999	2000+
	Overall	35.1	33.1	14.3	8.2	9.4
Kathmandu vs others	Kathmandu Valley	8.1	23.1	24.2	22.2	22.4
	Outside Kathmandu	39.7	34.8	12.6	5.8	7.1
pment	Eastern	33.5	47.9	10.1	6.3	2.2

	Central	35.0	23.9	17.2	11.8	12.1
	Western	35.1	31.7	17.8	8.2	7.3
	Mid Western	28.8	36.8	15.1	8.2	11.1
	Far Western	41.4	31.8	9.4	4.8	12.5
Gender	Male	32.5	33.7	14.8	9.1	9.9
	Female	41.4	30.9	12.9	6.4	8.4
Age Group	15-19	54.6	26.2	8.8	4.0	6.4
	20-24	41.0	33.7	12.1	5.8	7.4
	25-29	31.4	36.4	14.6	9.8	7.7
	30-59	25.8	32.3	17.4	10.4	14.0
	60+	31.0	17.2	31.0	10.3	10.3
Educational Level	Illiterate	65.5	16.7	8.3	6.0	3.6
	Read/write	52.4	26.2	12.6	4.5	4.3
	Under SLC	44.5	30.9	11.9	6.0	6.8
	11-12/Certificate	30.4	39.0	14.7	7.2	8.7
	Bachelor	21.4	34.4	15.6	12.8	15.8
	Masters and above	6.8	30.8	27.8	18.0	16.5
Occupation of Respondent	Agriculture	68.0	21.8	6.8	1.4	2.0
	Business	22.3	33.2	19.4	10.5	14.6
	Industry	43.0	31.2	6.5	6.5	12.9
	Government service	24.5	42.8	17.0	7.4	8.3
	Government teacher	23.1	46.2	11.5	3.8	15.4
	Private service	28.2	36.3	13.7	13.7	8.0
	Private teacher	34.4	39.1	12.5	10.9	3.1
	Housewife	42.9	30.9	12.1	6.8	7.4
	Student	44.9	31.8	11.0	5.9	6.3
	Others	47.4	28.9	7.9	11.8	3.9
Monthly Income of Respondent	less than 5000	64.6	24.8	5.1	2.0	3.5
	5000-9999	23.8	49.9	14.4	5.3	6.5
	10000-14999	8.4	29.9	27.5	17.8	16.4
	15000-19999	1.7	18.5	36.1	25.2	18.5
	20000 and above	3.3	12.2	13.8	25.2	45.5

Figure 4.4

Graphical Representation

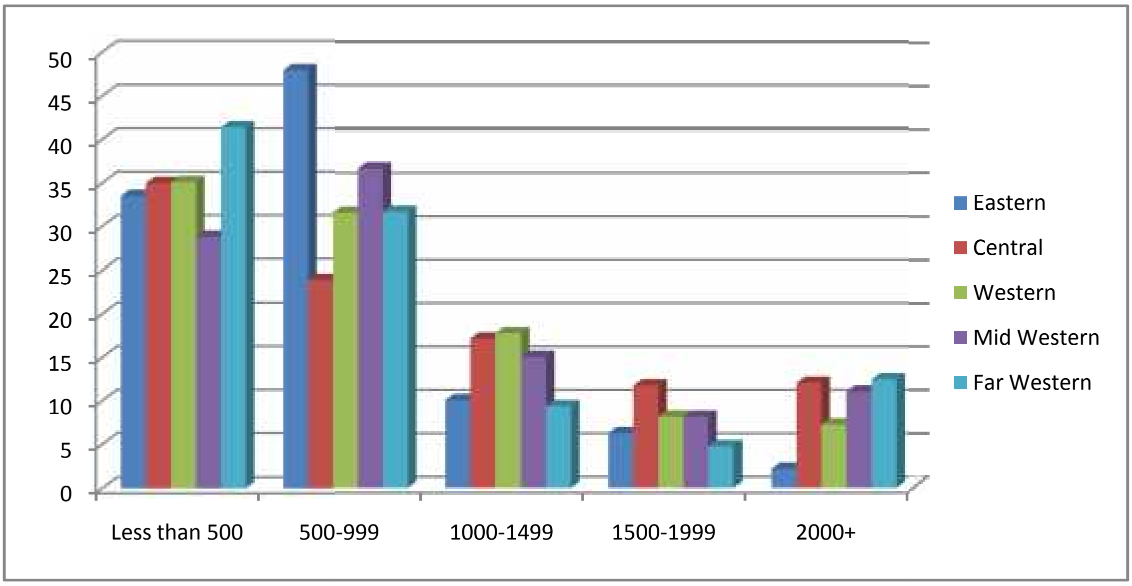


Table 4.8 depicts that respondents in Kathmandu valley the majority of subscribers (24.2%) spends 1000-1499 per month and 22.4% spends about more than 2000 per month. Outside Kathmandu valley, 39.7% of the respondents show their monthly phone expenditure to be less than 500, 34.8% between 500 to 999, 14.3% between 1000 to 1499, 5.8% between 1500 to 1999 and 7.1% in 2000 plus. In overall, around 33% of the subscribers are spending 500-999 per month.

4.5.1 *Average Revenue per User (ARUP)

Table 4.9

Average Revenue per User (ARUP)

Service	ARPU/ Month(in Rs)
Fixed Telephone (Wireline+ WLL+ Limited Mobility)	855.69
Cellular Service (Prepaid + Postpaid)	374.12
Internet	2136.12
GMPCS	6344.62
Rural Telecom Services	12oo.88 (STM Only Per PCO)

**Source Quarterly Performance Indicator of Telecom Services (August 2008)*

Though the table 4.9 doesn't clearly segment the total population into development regions, Gender, Age Group, Education, Level, occupation of Respondent, Monthly income of Respondent but it separates the Purchasing

Rate or Average Revenue per user of Subscribers. According to the table the ARPU of Fixed Line is 855.69 and Cellular Service is 374.12 which are almost equivalent to the average Spending of Subscribers of Consumers Survey which is 500-999 per Month.

4.5.2 Satisfaction Level of Network Coverage

Table 4.10

Satisfaction Level of Network Coverage

		NTC Mobile			Mero Mobile			UTL Phone			NTC CDMA		
		***	**	*	***	**	*	***	**	*	***	**	*
	Overall	8.5	36.4	55.1	36.3	44.1	19.7	76.9	23.1	0	32.5	44.4	23.1
Kathmandu vs others	Kathmandu Valley	3	43.5	53.5	36.2	46.6	17.2	0	100	0	25	75	0
	Outside Kathmandu	9.7	34.9	55.4	36.3	43.7	20	90.9	9.1	0	33	42.2	24.8
Development Region	Eastern	6.9	59.3	33.8	40.6	52.3	7	0	0	0	36.4	36.4	27.3
	Central	22.1	40.8	37.1	50.7	27.8	21.5	76.9	23.1	0	53.1	46.9	0
	Western	4.9	43.2	51.9	29.4	50.3	20.2	0	0	0	30.8	69.2	0
	Mid Western	0.4	10.1	89.6	5.9	41.2	52.9	0	0	0	13.8	55.2	31
	Far Western	3.5	32.5	64	19.7	49.2	31.1	0	0	0	28.1	25	46.9
Gender	Male	8.5	34	57.4	34.4	45.4	20.2	77.8	22.2	0	30.2	40.7	29.1
	Female	8.2	43.8	47.9	41.1	41.1	17.8	75	25	0	42.9	50	7.1
Age Group	15-19	10.8	28.5	60.8	45.1	32.9	22	50	50	0	40	50	10
	20-24	8.8	39	52.3	33.5	42.7	23.9	75	25	0	33.3	47.6	19
	25-29	8.9	41	50.1	40.6	46.2	13.3	100	0	0	42.4	33.3	24.2
	30-59	7.9	32.7	59.5	26.9	58.2	14.9	66.7	33.3	0	24.5	46.9	28.6
	60+	0	28.6	71.4	0	0	100	0	0	0	0	100	0
Educational Level	Illiterate	11.1	27.8	61.1	50	25	25	0	0	0	66.7	33.3	0
	Read/write	8.3	42.9	48.9	36.7	42.9	20.4	100	0	0	40	60	0
	Under SLC	8.4	37.1	54.5	37.8	40.9	21.3	100	0	0	35.1	37.8	27
	11-12/Certificate	10.7	37.8	51.5	39	40.5	20.5	71.4	28.6	0	24.2	57.6	18.2
	Bachelor	7.4	36.6	56	30.6	51.6	17.7	0	100	0	33.3	28.6	38.1
	Masters and above	3.7	19.4	76.9	25	75	0	0	0	0	25	37.5	37.5
Occupation of Respondent	Agriculture	3.1	50	46.9	35.7	42.9	21.4	0	0	0	37.5	50	12.5
	Business	7.7	34.4	57.8	38.6	47.9	13.6	77.8	22.2	0	42.6	29.8	27.7
	Industry	25.6	41	33.3	12.5	75	12.5	0	0	0	0	50	50
	Gov-service	12.3	38.3	49.4	27.3	69.7	3	0	0	0	35.7	50	14.3
	Gov-teacher	16.2	10.8	73	33.3	50	16.7	0	0	0	50	50	0
	Private service	2.3	33.1	64.6	38.5	43.6	17.9	0	0	0	0	70	30
	Private teacher	5.9	44.1	50	16.7	83.3	0	0	0	0	20	40	40

	Housewife	4.5	48.5	47	37.2	34.9	27.9	100	0	0	22.2	55.6	22.2
	Student	9.3	35.6	55.1	38	38	24	66.7	33.3	0	33.3	50	16.7
	Others	22	41.5	36.6	7.7	38.5	53.8	0	0	0	0	100	0
Monthly Income of Respondent	less than 5000	10.5	38.3	51.2	42.7	41.4	15.9	100	0	0	51.5	30.3	18.2
	5000-9999	12.9	34.6	52.5	37.5	49.3	13.2	75	25	0	28.1	50	21.9
	10000-14999	5.1	41.4	53.5	24.4	64.4	11.1	0	0	0	17.6	52.9	29.4
	15000-19999	5.1	35.7	59.2	25	50	25	0	0	0	22.2	44.4	33.3
	20000 and above	5.1	38.4	56.6	33.3	66.7	0	0	0	0	33.3	50	16.7

*Note: *** Satisfied **Average * Not Satisfied*

Figure 4.5

Satisfaction Level of Network Coverage

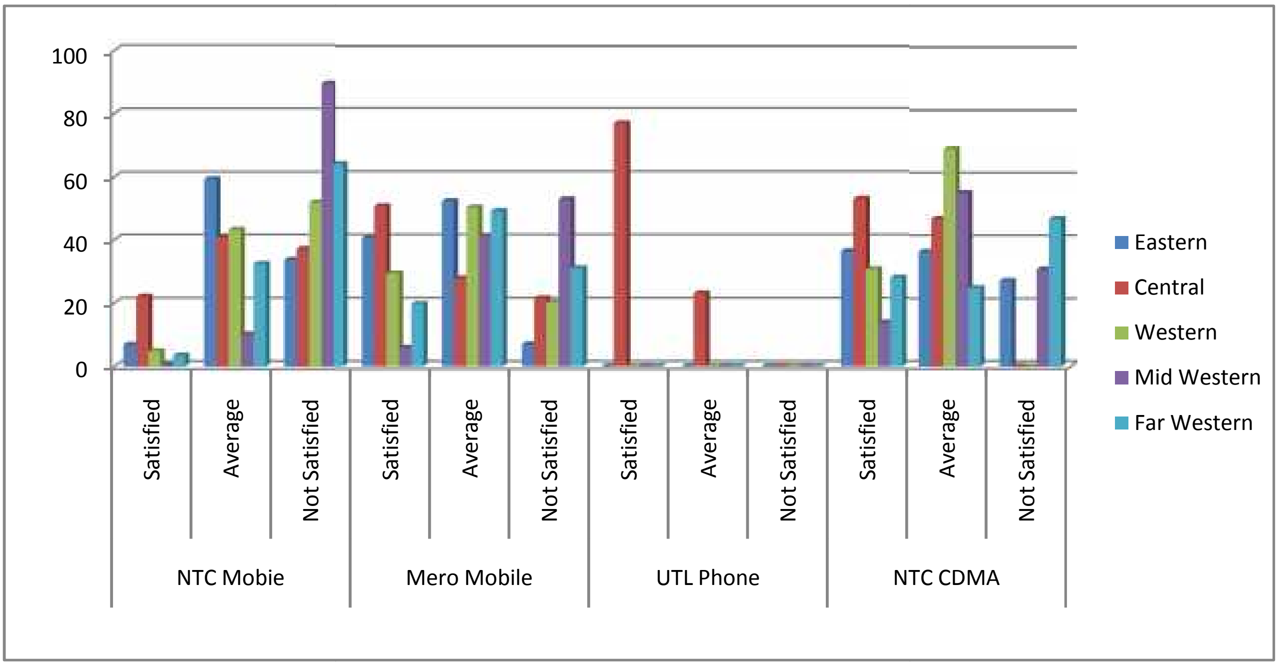


Table 4.10 shows that inside Kathmandu valley, 53.5% of the respondents are not satisfied, 43.5% feel average and only 3% are satisfied with the network coverage of NTC. Similarly, 17.2% are not satisfied, 46.6% feel average and 36.2% are satisfied with the network coverage of Mero Mobile.

In eastern region, 59.3% of the respondents feel average and 33.8% are not satisfied by the network coverage of NTC. Similarly, 7% are not happy, 40.6% are satisfied and 52.3% feel average about the network coverage of Mero

Mobile. In mid western and far western regions 89.6% and 64% of the respondents are not satisfied with the network coverage of NTC.

4.5.3 Satisfaction Level of Customer Service

Table 4.11

Satisfaction Level of Customer Service

		NTC Phone			Mero Mobile			UTL Phone			NTC CDMA		
		***	**	*	***	**	*	***	**	*	***	**	*
	Overall	8.2	50.1	41.7	29.7	55.0	15.3	15.4	61.5	23.1	26.4	45.3	28.3
Ktm vs others	Kathmandu	10.0	55.2	34.9	27.6	63.8	8.6	0.0	50.0	50.0	37.5	50.0	12.5
	Outside Kathmandu	7.8	48.9	43.3	30.0	53.8	16.3	18.2	63.6	18.2	25.5	44.9	29.6
Development Region	Eastern	16.3	40.1	43.5	25.8	64.5	9.7	0.0	0.0	0.0	10.0	30.0	60.0
	Central	9.7	64.0	26.3	41.7	51.4	6.9	15.4	61.5	23.1	28.1	40.6	31.3
	Western	5.6	52.9	41.5	23.6	52.9	23.6	0.0	0.0	0.0	15.4	76.9	7.7
	Mid Western	6.8	32.7	60.5	35.3	29.4	35.3	0.0	0.0	0.0	40.7	48.1	11.1
	Far Western	5.8	48.8	45.3	19.1	63.8	17.0	0.0	0.0	0.0	20.8	37.5	41.7
Gender	Male	7.8	48.3	43.8	29.0	55.7	15.3	11.1	55.6	33.3	22.4	42.1	35.5
	Female	9.6	55.1	35.2	32.0	53.1	15.0	25.0	75.0	0.0	40.7	48.1	11.1
Age Group	15-19	4.5	52.3	43.2	42.1	39.5	18.4	0.0	50.0	50.0	62.5	25.0	12.5
	20-24	8.2	53.4	38.5	23.5	61.7	14.8	0.0	75.0	25.0	36.8	36.8	26.3
	25-29	10.0	52.5	37.5	32.2	54.2	13.6	33.3	33.3	33.3	22.6	41.9	35.5
	30-59	7.9	45.7	46.3	30.8	55.4	13.8	33.3	66.7	0.0	15.9	56.8	27.3
	60+	0.0	23.1	76.9	0.0	0.0	100	0.0	0.0	0.0	0.0	0.0	100
Educational Level	Illiterate	12.5	37.5	50.0	0.0	75.0	25.0	0.0	0.0	0.0	0.0	100	0.0
	Read/write	6.5	58.5	35.0	33.3	58.3	8.3	0.0	100	0.0	40.0	26.7	33.3
	Under SLC	11.8	50.0	38.2	37.7	47.4	14.9	33.3	33.3	33.3	32.4	52.9	14.7
	11-12/ Certificate	7.5	49.9	42.6	26.5	54.7	18.8	14.3	71.4	14.3	30.0	40.0	30.0
	Bachelor	5.9	51.5	42.6	28.4	58.7	12.8	0.0	0.0	100	10.5	42.1	47.4
	Masters and above	9.7	36.9	53.4	12.5	75.0	12.5	0.0	0.0	0.0	0.0	66.7	33.3
Occupation of Respondent	Agriculture	10.3	55.2	34.5	35.7	64.3	0.0	0.0	0.0	0.0	50.0	37.5	12.5
	Business	8.3	46.7	45.0	30.6	55.4	14.0	11.1	77.8	11.1	23.3	44.2	32.6
	Industry	21.9	59.4	18.8	37.5	50.0	12.5	0.0	0.0	0.0	50.0	0.0	50.0
	Gov-service	11.1	53.5	35.4	37.5	59.4	3.1	0.0	0.0	0.0	7.1	57.1	35.7
	Gov- teacher	6.1	54.5	39.4	33.3	33.3	33.3	0.0	0.0	0.0	0.0	50.0	50.0
	Private service	7.2	47.4	45.4	40.5	51.4	8.1	0.0	0.0	0.0	0.0	62.5	37.5
	Private teacher	16.1	38.7	45.2	16.7	66.7	16.7	0.0	0.0	0.0	25.0	50.0	25.0
	Housewife	11.0	50.0	39.0	26.3	50.0	23.7	100.0	0.0	0.0	25.0	62.5	12.5
	Student	4.4	52.2	43.3	27.6	53.0	19.3	0.0	33.3	66.7	60.0	20.0	20.0
	Others	2.7	64.9	32.4	7.7	84.6	7.7	0.0	0.0	0.0	0.0	100	0.0
Monthly Inco	less than 5000	7.5	49.1	43.3	35.6	55.5	8.9	0.0	100	0.0	48.3	24.1	27.6
	5000-9999	10.3	53.1	36.6	30.5	60.2	9.3	12.5	75.0	12.5	10.7	60.7	28.6

	10000-14999	8.9	52.6	38.4	18.4	65.8	15.8	0.0	0.0	0.0	6.3	43.8	50.0
	15000-19999	9.6	50.0	40.4	27.3	54.5	18.2	0.0	0.0	0.0	11.1	66.7	22.2
	20000 and above	2.2	46.1	51.7	28.6	57.1	14.3	0.0	0.0	0.0	16.7	66.7	16.7

*Note: *** Satisfied ** Average * Not Satisfied*

Figure 4.6

Satisfaction Level of Customer Service

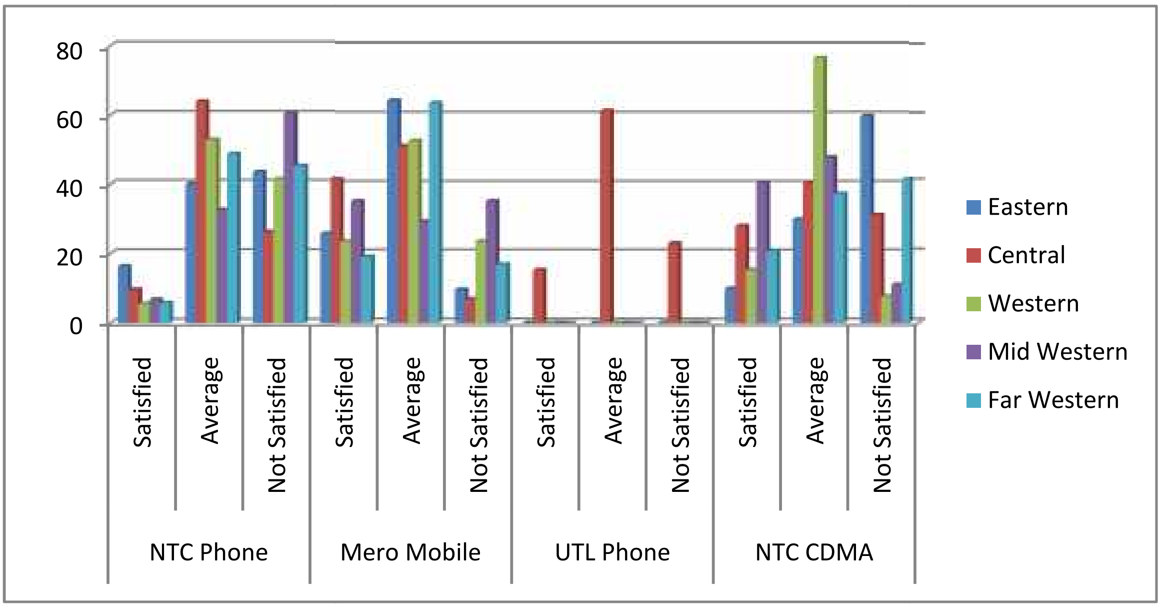


Table 4.11 shows that inside Kathmandu valley, 55.2% and 63.8% of the respondent feel that customer services provided by NTC and Mero mobile respectively is average. Similarly, in outside Kathmandu Valley area, 48.9% and 53.8% of the respondents feel that customer services provided by NTC and Mero mobile respectively is average.

In eastern region, 43.5% and in mid western region 60.5% of the respondents are not satisfied by the customer service of NTC. Similarly, in central, western and far western regions, 64%, 52.9% and 48.8% respectively feel that customer service provided by NTC is average.

In overall scenario, 50.1% and 55% of the respondents feel that customer service being provided by the NTC and Mero mobile respectively is average.

4.5.4 Satisfaction Level of Call Rate of Mobile Service

Table 4.12
Satisfaction Level of Call Rate of Mobile Service

		NTC Phone			Mero Mobile			UTL Phone			NTC CDMA		
		***	**	*	***	**	*	***	**	*	***	**	*
	Overall	11.7	40.0	48.3	8.4	31.4	60.2	46.2	46.2	7.7	25.9	46.4	27.7
Ktm vs others	Ktm Valley	5.0	32.2	62.8	1.7	8.6	89.7	50.0	0.0	50.0	0.0	62.5	37.5
	Outside Ktm	13.1	41.7	45.2	9.4	34.7	55.9	45.5	54.5	0.0	27.9	45.2	26.9
Development Region	Eastern	11.9	22.2	65.9	16.0	9.9	74.1	0.0	0.0	0.0	33.3	44.4	22.2
	Central	13.5	42.1	44.4	6.3	36.1	57.6	46.2	46.2	7.7	15.6	68.8	15.6
	Western	9.2	53.1	37.6	8.8	42.5	48.8	0.0	0.0	0.0	23.1	53.8	23.1
	Mid Western	20.1	44.0	35.8	0.0	11.8	88.2	0.0	0.0	0.0	41.4	48.3	10.3
	Far Western	5.3	29.9	64.8	5.0	25.0	70.0	0.0	0.0	0.0	20.7	17.2	62.1
Gender	Male	12.6	38.7	48.7	7.4	30.6	61.9	55.6	44.4	0.0	24.4	45.1	30.5
	Female	8.9	44.2	46.9	10.1	33.8	56.1	25.0	50.0	25.0	33.3	44.4	22.2
Age Group	15-19	13.9	29.5	56.6	10.4	19.5	70.1	0.0	50.0	50.0	37.5	25.0	37.5
	20-24	10.1	43.8	46.0	7.9	33.0	59.1	75.0	25.0	0.0	36.8	47.4	15.8
	25-29	12.7	43.9	43.4	10.3	40.5	49.1	33.3	66.7	0.0	18.8	53.1	28.1
	30-59	11.6	37.1	51.3	4.8	25.4	69.8	66.7	33.3	0.0	20.4	49.0	30.6
	60+	8.3	25.0	66.7	0.0	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0
Educational Level	Illiterate	11.1	22.2	66.7	0.0	75.0	25.0	0.0	0.0	0.0	0.0	33.3	66.7
	Read/write	12.9	53.2	33.9	8.3	47.9	43.8	100	0.0	0.0	33.3	60.0	6.7
	Under SLC	11.8	43.2	45.0	12.3	32.8	54.9	33.3	66.7	0.0	27.8	47.2	25.0
	11-12/Certificate	13.1	37.6	49.2	7.8	31.9	60.2	28.6	57.1	14.3	38.7	38.7	22.6
	Bachelor	9.9	37.5	52.6	5.4	22.5	72.1	100	0.0	0.0	10.5	52.6	36.8
	Masters and above	9.6	35.6	54.8	0.0	0.0	100.0	0.0	0.0	0.0	0.0	37.5	62.5
Occupation of Respondent	Agriculture	3.3	53.3	43.3	7.7	53.8	38.5	0.0	0.0	0.0	12.5	87.5	0.0
	Business	12.8	41.2	46.0	10.7	35.5	53.7	55.6	33.3	11.1	31.9	44.7	23.4
	Industry	16.7	47.2	36.1	12.5	37.5	50.0	0.0	0.0	0.0	50.0	0.0	50.0
	Gov-service	12.7	35.9	51.4	6.9	44.8	48.3	0.0	0.0	0.0	14.3	50.0	35.7
	Gov-teacher	19.4	38.9	41.7	20.0	20.0	60.0	0.0	0.0	0.0	0.0	100.0	0.0
	Private service	11.7	40.4	48.0	13.2	28.9	57.9	0.0	0.0	0.0	20.0	20.0	60.0
	Private teacher	11.8	32.4	55.9	16.7	16.7	66.7	0.0	0.0	0.0	20.0	40.0	40.0
	Housewife	7.3	42.7	50.0	7.9	26.3	65.8	0.0	100	0.0	12.5	62.5	25.0
	Student	11.5	34.4	54.1	6.5	26.3	67.2	33.3	66.7	0.0	42.9	35.7	21.4
	Others	2.7	56.8	40.5	0.0	40.0	60.0	0.0	0.0	0.0	0.0	0.0	100.0
Monthly Income of Respondent	less than 5000	8.5	42.8	48.7	9.2	40.8	50.0	100	0.0	0.0	37.5	37.5	25.0
	5000-9999	17.8	38.8	43.4	14.0	35.1	50.9	50.0	37.5	12.5	25.0	40.6	34.4
	10000-14999	12.1	42.4	45.5	2.8	36.1	61.1	0.0	0.0	0.0	11.8	64.7	23.5
	15000-19999	10.0	44.4	45.6	8.3	16.7	75.0	0.0	0.0	0.0	25.0	50.0	25.0
	20000 and above	5.2	34.0	60.8	0.0	0.0	100.0	0.0	0.0	0.0	16.7	50.0	33.3

*Note: *** Satisfied ** Average * Not Satisfied*

Figure 4.7

Satisfaction Level of Call Rate of Mobile Service

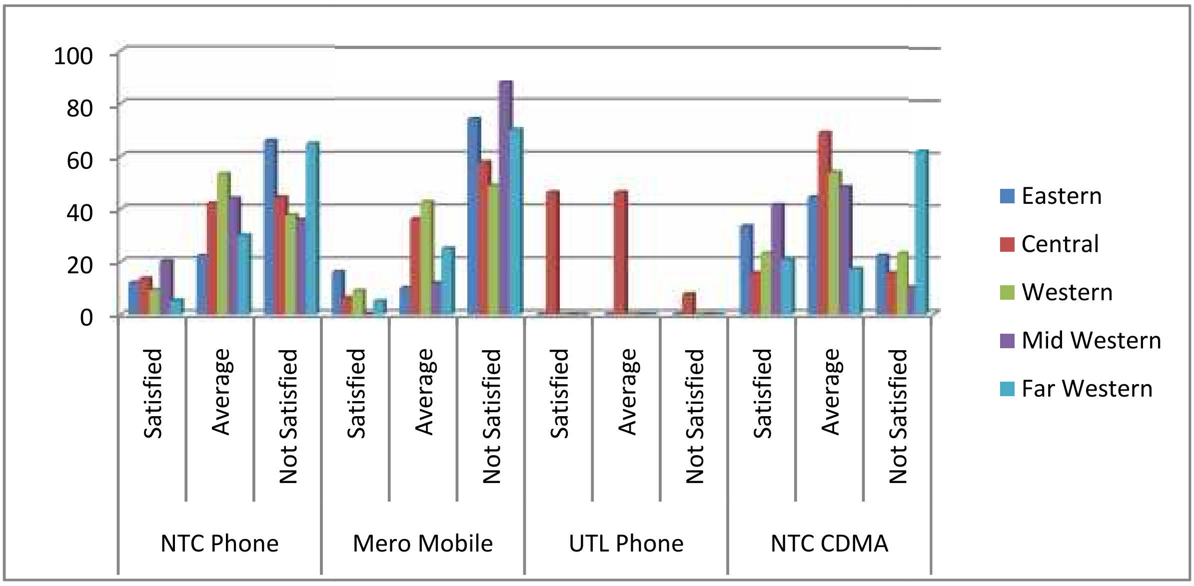


Table 4.12 shows that inside Kathmandu valley, 62.8% and 89.7% of the respondent are not happy with the call tariff of NTC and Mero mobile respectively. Similarly, in outside Kathmandu Valley area, 45.2% and 55.9% of the respondents are not satisfied with the call tariff of NTC and Mero mobile respectively.

The research indicates that in all places, subscribers are not satisfied by the tariffs of either NTC or Mero mobile

4.5.5 Satisfaction Level of Value added Service of Different Mobile Service

Table 4.13

Satisfaction Level of Value Added Service of Different Mobile Service

		NTC Phone			Mero Mobile			UTL Phone			NTC CDMA		
		***	**	*	***	**	*	***	**	*	***	**	*
	Overall	38.9	41.7	19.4	51.6	37.1	11.4	11.1	11.1	77.8	27.8	39.2	33.0
Ktm vs other	Ktm Valley	23.9	66.5	9.6	24.6	66.7	8.8	0.0	0.0	100.0	0.0	33.3	66.7
	Outside Ktm	41.9	36.7	21.4	55.1	33.3	11.7	14.3	14.3	71.4	28.7	39.4	31.9
Development Region	Eastern	81.3	16.7	2.0	92.9	6.3	0.8	0.0	0.0	0.0	10.0	20.0	70.0
	Central	23.3	61.5	15.2	29.4	59.4	11.2	12.5	12.5	75.0	15.8	47.4	36.8
	Western	18.3	46.0	35.7	40.6	42.6	16.8	0.0	0.0	0.0	8.3	50.0	41.7
	Mid Western	49.2	38.6	12.1	70.6	17.6	11.8	0.0	0.0	0.0	48.3	44.8	6.9
	Far Western	41.7	32.8	25.6	41.0	39.3	19.7	0.0	0.0	0.0	29.6	29.6	40.7
Gender	Male	39.4	40.3	20.3	50.1	36.4	13.5	16.7	0.0	83.3	31.1	35.1	33.8
	Female	35.8	47.1	17.2	54.1	38.9	7.0	0.0	33.3	66.7	20.0	55.0	25.0
Age Group	15-19	37.9	41.1	21.0	55.1	35.9	9.0	0.0	0.0	100	25.0	75.0	0.0
	20-24	36.1	40.5	23.4	49.3	39.4	11.3	33.3	33.3	33.3	11.8	41.2	47.1
	25-29	45.8	38.5	15.7	55.3	34.0	10.6	0.0	0.0	100.0	36.7	30.0	33.3
	30-59	35.2	45.7	19.2	47.8	37.3	14.9	0.0	0.0	0.0	26.2	42.9	31.0
	60+	28.6	42.9	28.6	0.0	0.0	100.0	0.0	0.0	0.0	100.0	0.0	0.0
Educational Level	Illiterate	43.8	56.3	0.0	75.0	25.0	0.0	0.0	0.0	0.0	0.0	50.0	50.0
	Read/write	46.2	35.9	17.9	36.7	55.1	8.2	0.0	0.0	0.0	23.1	53.8	23.1
	Under SLC	34.5	42.0	23.4	49.2	40.3	10.5	33.3	0.0	66.7	25.9	48.1	25.9
	11-12/Certificate	37.1	42.7	20.1	56.0	32.5	11.5	0.0	20.0	80	37.9	34.5	27.6
	Bachelor	39.0	42.6	18.4	54.5	32.2	13.2	0.0	0.0	100	26.3	26.3	47.4
	Masters and above	51.9	34.9	13.2	25.0	50.0	25.0	0.0	0.0	0.0	14.3	28.6	57.1
Occupation of Respondent	Agriculture	31.0	48.3	20.7	42.9	50.0	7.1	0.0	0.0	0.0	37.5	25.0	37.5
	Business	41.8	36.8	21.5	44.2	39.9	15.9	20.0	0.0	80.0	28.9	39.5	31.6
	Industry	29.7	51.4	18.9	37.5	62.5	0.0	0.0	0.0	0.0	50.0	50.0	0.0
	Gvt. service	42.5	42.5	15.0	72.7	27.3	0.0	0.0	0.0	0.0	14.3	28.6	57.1
	Gvt. teacher	35.1	45.9	18.9	33.3	50.0	16.7	0.0	0.0	0.0	0.0	50.0	50.0
	Pvt. service	33.9	46.8	19.3	56.4	35.9	7.7	0.0	0.0	0.0	40.0	30.0	30.0
	Pvt. teacher	32.4	52.9	14.7	50.0	50.0	0.0	0.0	0.0	0.0	50.0	0.0	50.0
	Housewife	41.0	42.6	16.4	57.1	33.3	9.5	0.0	0.0	100	14.3	71.4	14.3
	Student	40.4	40.8	18.8	55.0	33.0	12.0	0.0	33.3	66.7	20.0	60.0	20.0
	Others	24.4	51.2	24.4	15.4	69.2	15.4	0.0	0.0	0.0	0.0	100.0	0.0
Monthly Income of Respondent	less than 5000	39.7	40.6	19.7	53.3	40.1	6.6	0.0	0.0	100.0	32.1	35.7	32.1
	5000-9999	39.9	41.4	18.7	58.2	32.8	9.0	25.0	0.0	75.0	32.1	39.3	28.6
	10000-14999	38.0	40.8	21.1	47.7	40.9	11.4	0.0	0.0	0.0	28.6	28.6	42.9
	15000-19999	40.2	41.3	18.5	16.7	41.7	41.7	0.0	0.0	0.0	0.0	44.4	55.6
	20000 and above	48.4	42.1	9.5	33.3	66.7	0.0	0.0	0.0	0.0	40.0	0.0	60.0

*Note: *** Satisfied ** Average* Not Satisfied*

Figure 4.8

Satisfaction Level of Value Added Service of Different Mobile Services

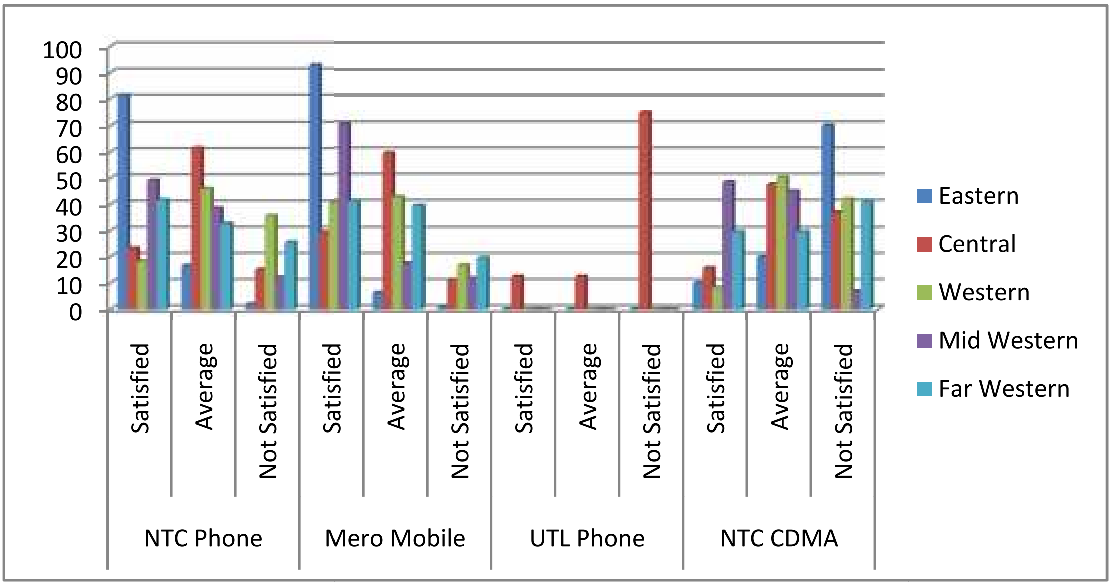


Table 4.13 shows that in overall, Mero mobile users are highly satisfied with the Value added service with 51.6% users and 41.7% feel average about the value added service of NTC. Similarly, in Kathmandu Valley, 66.5% and 66.7% feel average about the value added services provided by NTC and Mero mobile respectively.

4.6 Future Expectation about New Mobile Service or Improvement in Existing Mobile Service

Table 4.14

Future Expectation about New Mobile Service or Improvement in Existing Mobile Service

		% of respondents who want new mobile service or improvement in existing mobile service	
		New Mobile Service	Improvement on existing mobile service
	Overall	55.4	44.6
Ktm vs others	Kathmandu Valley	58.9	41.1
	Outside Ktm	54.8	45.2
Development Region	Eastern	54.0	46.0
	Central	73.4	26.6
	Western	53.7	46.3
	Mid Western	34.3	65.7
	Far Western	47.7	52.3
Gender	Male	55.7	44.3
	Female	54.3	45.7
Age Group	15-19	63.3	36.7
	20-24	58.9	41.1
	25-29	55.0	45.0
	30-59	49.7	50.3
	60+	44.8	55.2
Educational Level	Illiterate	50.0	50.0
	Read/write	51.5	48.5
	Under SLC	58.4	41.6
	11-12/Certificate	54.9	45.1
	Bachelor	55.5	44.5
	Masters and above	60.0	40.0
Occupation of Respondent	Agriculture	59.4	40.6
	Business	53.0	47.0
	Industry	47.1	52.9
	Gvt. service	57.8	42.2
	Gvt. teacher	55.8	44.2
	Private service	53.4	46.6
	Private teacher	51.6	48.4
	Housewife	44.0	56.0
	Student	64.3	35.7
	Others	56.3	43.8
Monthly Income of Respondent	less than 5000	55.2	44.8
	5000-9999	55.0	45.0
	10000-14999	53.2	46.8

	15000-19999	54.6	45.4
	20000 and above	56.6	43.4

Table 4.14 depicts that with only few exceptions, majority of respondents in all categories prefer new mobile service over improvement on existing mobile service. Inside Kathmandu valley, 58.9% of the respondents prefer new mobile service as compared to 41.1% respondents preferring improvement on existing mobile service. Outside Kathmandu valley, 54.8% of the respondents prefer new mobile service as compared to 45.25% preferring improvement on existing mobile service. Considering total respondents both inside and outside Kathmandu valley, 55.4% respondents prefer new mobile service as compared to 44.6% respondents expecting improvement in existing mobile service.

4.7 Services to be Included in New Mobile Service

Table 4.15

Services to be Included in New Mobile Service

		Traffic update	News update	Television Viewing System	Ticketing	Stock price update
	Overall	23.6	68.4	33.8	12.4	12.2
Ktm vs others	Ktm	30.8	74.0	35.7	7.4	14.7
	Outside Ktm	22.4	67.5	33.5	13.2	11.8
Development Region	Eastern	4.3	64.8	42.3	5.8	9.2
	Central	37.5	78.4	33.1	16.0	17.6
	Western	4.6	44.6	13.0	2.8	4.0
	Mid Western	18.0	64.1	44.4	21.4	11.1
	Far Western	44.0	85.5	41.4	15.6	16.6
Gender	Male	26.6	71.8	33.6	14.8	14.5
	Female	17.4	60.5	33.8	7.0	7.1
Age Group	15-19	22.2	55.0	35.3	9.4	2.9
	20-24	25.6	66.9	32.9	10.7	9.9
	25-29	23.7	68.3	34.1	12.2	13.0
	30-59	22.7	75.1	34.0	15.4	17.2
	60+	13.8	65.5	24.1	6.9	17.2
Educational Level	Illiterate	10.8	58.1	28.0	5.4	4.3
	Read/write	18.4	63.0	30.8	9.0	6.6
	Under SLC	23.3	71.0	36.5	13.3	9.2
	11-12/Certificate	24.5	67.3	32.2	12.6	13.6
	Bachelor	26.7	71.5	34.6	12.6	15.7
	Masters and above	32.6	71.2	39.1	21.1	30.1
Occupation of Respondent	Agriculture	13.9	59.1	27.7	10.9	9.8
	Business	26.4	71.0	35.7	15.1	17.3
	Industry	22.8	68.3	39.2	12.7	17.6
	Gov-service	26.2	79.4	29.0	14.7	18.1
	Gov-teacher	23.1	82.7	30.8	21.2	21.2
	Private service	27.4	71.9	32.1	12.7	13.9
	Private teacher	26.6	71.9	40.6	14.1	14.1
	Housewife	11.7	62.3	34.5	4.2	3.9
	Student	25.5	65.4	32.9	11.5	7.7
	Others	29.6	58.0	44.4	16.0	7.4
Monthly Income of Respondent	Less than 5000	27.3	70.8	32.4	11.6	10.7
	5000-9999	25.9	73.3	31.8	13.7	15.1
	10000-14999	28.3	71.7	33.3	14.8	17.8
	15000-19999	19.3	63.9	33.6	14.3	29.4
	20000 and above	26.0	82.0	38.2	22.8	24.4

4.8 Services to be included in New Mobile Service (Contd.)

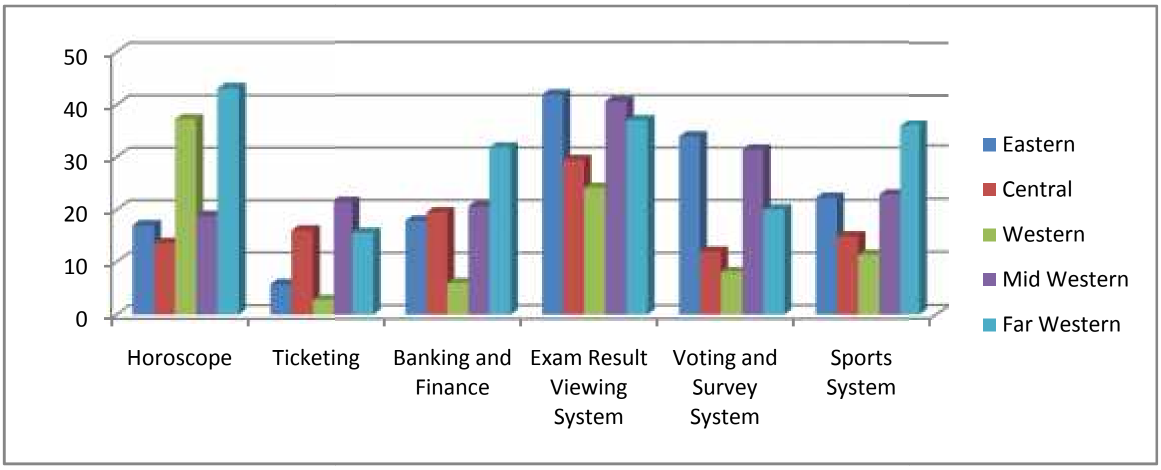
Table 4.16

Services to be included in New Mobile Service (Contd.)

		Horos cope	Ticketin g	Banking and Finance	Exam Result Viewing System	Voting and Survey System	Sports System
Ktm vs others	Kathmandu	17.2	7.4	26.4	21.9	9.3	23.0
	Outside Ktm	26.8	13.2	17.7	35.5	21.0	20.2
	Total	25.4	12.4	19.0	33.5	19.3	20.6
Development Region	Eastern	17.0	5.8	17.9	41.9	33.9	22.2
	Central	13.6	16.0	19.5	29.4	12.0	14.9
	Western	37.2	2.8	6.0	24.1	8.1	11.4
	Mid Western	18.8	21.4	20.6	40.6	31.4	22.8
	Far Western	43.1	15.6	31.8	37.0	20.0	35.9
Gender	Male	22.5	14.8	22.0	34.0	21.1	25.4
	Female	31.9	7.0	11.4	32.0	15.4	9.7
Age Group	15-19	29.7	9.4	9.4	64.7	19.7	29.7
	20-24	26.0	10.7	14.4	44.4	21.4	26.2
	25-29	26.8	12.2	20.1	24.1	20.7	18.7
	30-59	21.9	15.4	25.9	21.0	16.3	14.4
	60+	17.2	6.9	10.3	31.0	13.8	6.9
Educationa l Level	Illiterate	19.4	5.4	9.7	12.9	12.9	12.9
	Read/write	23.8	9.0	8.6	8.6	13.3	7.7
	Under SLC	28.8	13.3	14.1	32.4	18.5	17.2
	11-12/Certificate	25.1	12.6	18.8	41.8	21.5	23.8
	Bachelor	25.4	12.6	27.7	42.9	22.0	28.5
	Masters and above	18.8	21.1	48.9	37.6	21.1	30.8
Occupatio n of Responden t	Agriculture	23.8	10.9	9.1	13.9	18.2	10.9
	Business	23.6	15.1	26.7	22.2	18.0	17.2
	Industry	17.6	12.7	20.6	27.5	31.4	24.5
	Gov-service	17.2	14.7	27.7	26.1	22.7	19.3
	Gov-teacher	19.2	21.2	23.1	48.1	21.2	15.4
	Private service	22.1	12.7	23.6	22.2	16.5	23.7
	Private teacher	20.3	14.1	26.6	43.8	12.5	34.4
	Housewife	38.4	4.2	7.0	20.1	13.6	5.0
	Student	27.6	11.5	13.2	65.7	23.0	33.7
	Others	28.8	16.0	11.1	23.5	18.5	16.0
Monthly Income of Responden t	less than 5000	28.3	11.6	13.1	29.1	17.1	20.6
	5000-9999	18.9	13.7	20.3	26.1	19.5	17.6
	10000-14999	27.6	14.8	31.9	28.9	21.1	22.7
	15000-19999	32.8	14.3	42.9	25.2	17.6	24.4
	20000 and above	22.8	22.8	44.7	26.8	17.9	23.6

Figure 4.9

Services to be included in New Mobile Service



From above, the table shows different services to be included by new mobile service provider as follows:

- Traffic update
- News update
- Television viewing system
- Ticketing
- Stock price update
- Raashiphal
- Banking and finance
- Exam result viewing system
- Voting and survey system
- Sports update

Majority of the respondents in all categories preferred news update the most which is followed by other services like television viewing system and exam result viewing system.

4.9 Major Findings

There is a wide area in Nepal especially outside the Valley which is yet to experience the convenience of mobile phones and the people there have both curiousness and capacity to use the mobile phones. Only 14.5 % of the population of Nepal is using mobile phones.

Prepaid mobile phones are most preferred type of mobile service in Nepal, especially in Kathmandu. 55.1% of the NTC mobile users and, 19.7% of the Mero mobile as are not satisfied with the network coverage Satisfaction regarding Network coverage of NTC and Mero Mobile is Very Low that is only 8.5 and 36.3% only. Customers have lots of expectations from the value added services in mobile phones. Mostly people are satisfied with Mero mobile because most of the time the industries have added some value for its customers.

This is also because majority of the population had been displaced from their usual place of living. Most of the people have also left their family members due to the nature of their jobs and mobile phones have been the convenient way for them to be in touch with their loved ones.

CHAPTER - V

SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter presents the state of the whole research process, its prospects as consequence. The study is carried out to assess the potential market for emerging telecommunication in Nepal. The whole research process is concentrated on the services provided by top telecommunication industries of Nepal (NTC, Mero Mobile, UTL) The study mainly focus on the opinion of customer of different zones about the services and Facilities provided by the current telecommunications of Nepal. These Chapters summarizes the study and presents summary, conclusion and the main recommendation based on the whole study process and analysis of the data

5.1 Summary

Nepal Telecom

Nepal Telecom is one of the most popular and pioneer company in telecommunication industry in Nepal. In ancient time NTC has its Monopoly in its services and its tariffs. Earlier people use to wait for the schedule of distribution of the services and connection offered by NTC. Then the day, the distribution was announced people had to wait in a long queue. But with the entrance of Spice mobile (later got popular and accepted as Mero Mobile) and the United Telecommunication Limited UTL, the market turned out a bit competitive and sensitive for NTC. Responding to the scenario NTC made its connections and services available at anytime.

At present it has also introduced a new scheme called Friend and family offer where the customers talk to three numbers at 75% of the actual rate for per minute. It has also introduced a value added service called Nepal Telecom Notice Board Service targeting the School, Hospitals, Corporate Houses and Financial Institutions by giving them important notices. Airlines by giving their customers update regarding flight arrival/departure/delay flights. Media Houses by broadcasting them the breaking news, Traffic Police by providing traffic updates, Stock exchange by updating them with the market price of the shares.

Spice Nepal

Spice Nepal Private Ltd., popularly known under its brand name "Mero Mobile", is the first private GSM mobile operator in Nepal at Present Mero Mobile introduce many scheme plans which are as follows

No STD Charges: Mero mobile gives the call made by its mobile subscribe to landlines and other networks across the city within Nepal at local call rates. Therefore, there is no STD charge for any calls made to mobile or landline, anywhere within Nepal. All outgoing call will be at local rates.

It has introduced from November 1st, 2008, MERO MOBILE new "Free Talk Time" scheme that will be implemented for Access, Smart, Light tariff plans.

Free talk time will be provided to the subscriber in accordance to his/her spending on any chargeable services such as outgoing calls, SMS, MMS, GPRS or PRBT during one week.

Free Talk Time will be provided to subscriber according to the following scheme: Subscriber will get 15 minutes free Mero to Mero time and 4 SMS only in case he/she spends not less than NRs. 50 during the previous week. Validity period of 15 minutes free talk time and 4 SMS is one week. 1 week is a period from Sunday to Saturday. In total during one month period subscriber can get 60 minutes free Mero to Mero talk time and 16 SMS.

Free USSD Service: Unstructured Supplementary Service Data (USSD) is a GSM technology, used to send text between a mobile phone and an application in the operator's network. USSD provides session-based communication, enabling a variety of applications.

<u>Free Missed Call Notifications:</u> Missed Call is the unique feature in mobile, which enables you to know when and who called during your busy hours, out of coverage or your mobile is switched off.

United Telecom of Nepal (UTL)

United Telecom Ltd, a joint venture between Videsh Sanchar Nigam Ltd. (VSNL), Mahanagar Telephone Nigam Ltd. (MTNL), and Telecommunications Consultants India Ltd. (TCIL), and Nepal Ventures Private Ltd. (NVPL) plans to offer telephony services in Nepal, based on the wireless local loop (WLL) technology. After exhaustive deliberations & extensive scrutiny, UTL was declared successful bidder by NTA in the bid for basic telephone service based on WLL technology and letter of intent was awarded on 21st June 2001 &, finally, the license was issued on 4th October 2002.

Along with regular calling services, it also offers Voice mail, Call Forwarding, Call Waiting, Conference Call and data transfer facilities. It is compatible for Fax and Internet services as well. UTL provides WLL wireless phone services and is presently operating in the Central Development Region and has a fair customer base of about 200,000 subscribers owing mainly to its low tariff and easy availability.

The main objective of this study is analyze the potential market for the emerging telecom industries in Nepal through customer Survey based on existing telecommunication of Nepal.

Analyzing the market is one of the most crucial parts before launching the product and fixing the target group. The task on market analysis is segmentation of customer based on age, gender, population, income, etc.

Beyond this feedback and response about the similar products should be studied. And the limitations of the existing products should be made key factor for the purchasing of new product to the target Group.

This is a consumer survey study based on this topic “Market Analysis Based on existing Telecommunications of Nepal” where primary data are collected from public through customer survey and secondary data are collected from concern organizations.

In the First Chapter, Background of the study, Statement, Need, objectives and limitations of the study is presented. Need of Market analysis for the growth of organization is presented.

In the second chapter, the review of literature is made. This chapter briefly deals with conceptual frameworks of the study and review of thesis.

In the third chapter, research design, data collection method, sources of data populations and samples, data collection procedures, technique of data analysis are presented.

The fourth chapter examines about the services rendered by existing telecommunications to the target customers. Satisfaction level of people, tariff rate, services to be included, motivation factors, reasons of using phones are presented and analyzed.

Taking into account the top telecommunication industries of Nepal the services provided by these companies are analyzed from the mouth of users. In this study three telecom industries are taken into account they are mainly NT, Spice, and UTL. This study mainly focus the opinion of customer about the existing services and facilities provided by these industries, from their demand

and desire and from the secondary data the study tries to find out the market for the new telecommunication industry. In this study people interest about new telecommunication, existing services, tariff rates, services, satisfaction rate, people spending habit, motivational factor etc are discussed and analyzed

5.2 Conclusion

Use of mobile phones (Handheld Devices) is showing the increasing trends over the short period of time as compared with the PSTN Landline service.

There is a wide area in Nepal especially outside the Valley which is yet to experience the convenience of mobile phones and the people there have both curiousness and capacity to use the mobile phones.

Only 14.5 % of the population of Nepal is using mobile phones. Major gap area can be seen in the Far Western, Mid Western and Eastern region with mobile service subscription of 7.3%, 8.8% and 7.1% respectively.

Prepaid mobile phones are most preferred type of mobile service in Nepal, especially in Kathmandu.

55.1% of the NTC mobile users and, 19.7% of the Mero mobile as are not satisfied with the network coverage Satisfaction regarding Network coverage of NTC and Mero Mobile is Very Low that is only 8.5 and 36.3% only.

41.7% of NTC mobile users and 15.3% of Mero mobile users are not satisfied with the customer service of the respective companies.

48.3% of NTC mobile users and 60.2% of Mero mobile users are not happy with the rates (tariffs) of the respective companies.

Customers have lots of expectations from the value added services in mobile phones. Mostly people are satisfied with mero mobile because Most of the time the industries have added some value for its customers.

People generally use mobile phones to be in touch with the family members. This is also because majority of the population had been displaced from their usual place of living. Most of the people have also left their family members due to the nature of their jobs and mobile phones have been the convenient way for them to be in touch with their loved ones.

5.3 Recommendations

The Main recommendations of this study are as follows:

- There are almost twenty two development districts that can be an active market for telecom product.
- Major Markets are Kathmandu Lalitpur and Bhaktapur.
- Dang district may be divided into two parts, Dang Valley and Deukhuri in Terai.
- NTC and Mero Mobile operating only in Banke, Bardiya, Surkhet, Dang and Jumla hence an opportunity for emerging telecommunication is to make the whole area as their property.
- Another opportunity for growing telecom industry is that only 200 thousand people are carrying mobile in this area.
- Thus among the five development regions the mid western region provides more opportunity and favorable market due to low mobile penetration yet growing economies. Besides Banke Bardiya, Surkhet, half of Dang and Jumla we have almost Nine neglected regions in our court.
- The data of reason of using Mobile phone reveals that, among these different reasons for using mobile phone, the most common reasons are - to be in contact with the family and for business purpose. Except in few cases, more than 50% of the respondents in different categories use

mobile phones to be in direct contact with the family. Hence it can be concluded that it is the primary and most common reason for the use of mobile phones.

- The second important reason is for business purpose.
- Hence the communication should capitalize the primary and second reason and build strategy focusing on the same. But it does not mean that the other factors are neglected, at times it is also important to focus on those minute factors too in fact, and in other words the basic focus which would also work as a motivational factor is the first two important and common factors.
- Inside Kathmandu valley, 58.9% of the respondents prefer new mobile service as compared to 41.1% respondents preferring improvement on existing mobile service. So there is high priority of the new mobile services. Similarly outside Kathmandu valley, 54.8% of the respondents prefer new mobile service as compared to 45.25% preferring improvement on existing mobile service.
- Considering total respondents both inside and outside Kathmandu valley, 55.4% respondents prefer new mobile service as compared to 44.6% respondents expecting improvement in existing mobile service.
- Majority of the respondents in all categories preferred news update the most which is followed by other services like television viewing system and exam result viewing system. So Customer preference should be given high priority for the new industry.
- 55% of the NTC mobile users are not satisfied with the network coverage.41.7% of NTC mobile users and 15.3% of Mero mobile users are not satisfied with the customer service of the respective companies.48.3% of NTC mobile users and 60.2% of Mero mobile users are not happy with the rates (tariffs) of the respective companies. Customers have lots of expectations from the value added services in mobile phones. Considering these data as a major source the emerging

telecommunication must try to satisfy customers in Network, tariffs, and services.

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